INDEX

REBUTTAL TESTIMONY OF

VALERIE A. LEFLER, BYRNE E. LOVELL, SIDNEY L. CONGER,
EDWARD L. BLEIFUSS, BYRON G. KEEP, JAMES C. SAPP, ROBERT J. PROCTER,
TIMOTHY D. McCOY, AND CARIE E. LEE

Witnesses for Bonneville Power Administration

SUBJECT: Rebuttal Testimony for Risk Mitigation

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Section 1. Introduction and Purpose of Testimony

Q. Please state your names and qualifications.

A. My name is Valerie A. Lefler and my qualifications are contained in WP-02-Q-BPA-43.

A. My name is Byrne E. Lovell and my qualifications are contained in WP-02-Q-BPA-44.

A. My name is Sidney L. Conger and my qualifications are contained in WP-02-Q-BPA-14.

A. My name is Edward L. Bleifuss and my qualifications are contained in WP-02-Q-BPA-04.

A. My name is Byron G. Keep and my qualifications are contained in WP-02-Q-BPA-34.

A. My name is James C. Sapp and my qualifications are contained in WP-02-Q-BPA-62.

A. My name is Robert J. Procter and my qualifications are contained in WP-02-Q-BPA-60.

A. My name is Timothy D. McCoy and my qualifications are contained in WP-02-Q-BPA-46.

A. My name is Carie E. Lee and my qualifications are contained in WP-02-Q-BPA-70.

Q. Please state the purpose of your testimony.

A. Our testimony has several purposes. First, this testimony will respond to direct testimony filed by witnesses regarding Bonneville Power Administration's (BPA) 2002 Supplemental Power Rate Proposal (Supplemental Proposal) on starting reserves. Second, it will address issues raised about the design of the Cost Recovery Adjustment Clauses (CRAC). Third, it will address issues raised about the design of the Dividend Distribution Clause (DDC). Fourth, it will respond to a variety of issues regarding the Fish and Wildlife Funding Principles (Principles) and their implementation in this rate

proceeding. And fifth, it will address several issues raised about the adequacy of the Treasury Payment Probability (TPP).

Q. How is your testimony organized?

A. This testimony is organized into six sections including this introductory section. The second section deals with Starting Reserves. In Section 3, our testimony addresses the Cost Recovery Adjustment Clauses. In Section 4, we address the Dividend Distribution Clause. In Section 5, we address the implementation of the Fish and Wildlife Funding Principles. In Section 6, we address Treasury Payment Probability.

Section 2. Starting Reserves

Q. Both Columbia River Inter-Tribal Fish Commission (CRITFC) and Northwest Energy Coalition/Save Our Wild Salmon (NWEC/SOS) claim that BPA's proposal goes well beyond the parameters of the Federal Register Notice in that it adjusted starting reserves levels. See Sheets, et al., WP-02-E-CR/YA-06, at 8, lines 15-18; Weiss, WP-02-E-NA/SA-03, at 4, lines 17-23. NWEC/SOS states that BPA "adjusts starting reserves levels significantly, both directly and by changing the first year operation of the FB CRAC." See Weiss, WP-02-E-NA/SA-03, at 4, line 21-23. Do you agree with this representation?

A. No. BPA adjusted the starting reserves estimates, not to address a specific problem as implied by NWEC/SOS testimony, but simply to update this key input to the ToolKit. BPA has done this at each stage of this rate case and stated in the Amended Proposal, that "We expect to update FY 2001 ending reserves estimates . . . for the Final Rate Proposal." *See* Lefler, *et al.*, WP-02-E-BPA-66, at 19, lines 10-11.

The NWEC/SOS claim is incorrect that changing the first year operation of the Financial-Based (FB) CRAC somehow adjusts starting reserves levels. The change to the first year of the FB CRAC potentially allows BPA to collect more during the first year of the rate period, which would affect ending 2002 reserves not the level of Fiscal Year

(FY) 2001 ending reserves. *See* additional discussion on the timing of FB CRAC collection in Section 3(B) of this testimony. *See* Burns, *et al.*, WP-02-E-BPA-75, for further discussion of the claim that BPA exceeded the parameters of the FRN.

Q. *CRITFC argues that "Bonneville continues to double count the fish and wildlife restoration reserves under the Fish and Wildlife Funding Memorandum of Agreement. . . Bonneville continues to count this under-expenditure of funds as available for both fish and wildlife funding and general reserves. This double counting is wrong and increases the actual risk that Bonneville faces." Sheets, et al., WP-02-E-CR/YA-06, at 20, lines 14-20. Do you agree?*

A. No. BPA addressed this issue in the May Final Record of Decision (ROD), WP-02-A-02, at 7-40 to 7-44, and concluded that BPA has appropriately included the MOA carryforward funds balance in the starting reserves balance for 2002 and is not double-counting those funds. CRITFC raises no new facts or issues, and BPA stands by its previous position and the Administrator's decision.

Section 3. Cost Recovery Adjustment Clause

A. Load-Based Cost Recovery Adjustment Clause

1. Rebuttal of Issues Raised by the Joint Customer Group

Q. *The Joint Customer Group (JCG) indicated that the implementation of the LB CRAC includes calculations and rate adjustments made before-the-fact that rely on forecasts, and stated that separate calculations will be required in order to adjust rates after-the-fact. The JCG state "Because these before-the-fact and after-the-fact amounts are calculated somewhat differently, separate formulas are required." See Brattebo, et bal., WP-02-E-JCG-02, at 5, lines 12-14. Do you agree?*

A. No. A series of equations are used to make calculations before-the-fact that are exactly the same as the calculations made after-the-fact. Later in this rebuttal, BPA will provide testimony identifying specific changes to the proposed General Rate Schedule Provisions

(GRSPs) contained in WP-02-E-JCG-02 that will: (a) simplify the GRSPs; (b) allow for different values of the variables when the before-the-fact calculations are made than when the after-the-fact calculations are made; and (c) preserve differences between Slice and non-Slice calculations.

Q. *The JCG indicated that some confusion about new terminology contained in the March 2, 2001, summary document of the GRSPs could be cleared up by using a definition of non-Slice load, and then distinguishing between NSL(F) and NSL(A). Brattebo, et al., WP-02-E-JCG-02, at 8, lines 5-9. Do you agree with this proposed approach?*

A. Generally yes. However, in order for these definitions to work properly, the definition of Non-Slice Rates, which is itself used in the proposed definitions of NSL(F) and NSL(A), needs a minor revision. If the phrase "that are subject to LB CRAC" is removed, the resulting definition of NSL(F) and NSL(A) will work properly.

Q. *What is the reason for two different approaches to defining load?*

A. To determine the amount of augmentation that is required by BPA, BPA's share of the Federal Base System (FBS) or Monthly System Capability (MSC) must be subtracted from all of the loads it is responsible for serving, including sales that are not subject to the Load-Based (LB) CRAC. To determine how to distribute the cost of the LB CRAC among customers, only the sales subject to the LB CRAC are used.

Q. *The JCG proposes certain changes to Section f of the March 2, 2000, summary document. Brattebo, et al., WP-02-E-JCG-02, at 8, lines 20-22 and at 9, lines 1-5. Do you agree with these proposed changes?*

A. No. The proposed changes to Section f do not result in the correct calculations being performed. The method proposed for Section f in Attachment B of the JCG testimony does not assure that non-Slice customers assume all cost changes associated with replacing the 120-day rule with the 0-day rule. The approach proposed by BPA does assure this result.

Q. Is there a summary statement you can make about how BPA proposes to revise Section f contained in Attachment B of the JCG proposal (Attachment B)? See Brattebo, et al., WP-02-E-JCG-02, Attachment B.

A. Yes. Basically, Section f needs to be constructed exactly as Section d is constructed. Then the right calculations will be performed after-the-fact for each six-month period.

Q. Are there any other changes you are proposing to Attachment B?

A. Yes. While the JCG does not address this issue in testimony, Section g of Attachment B contains some revisions that follow from modifications they propose in Section f. With the revisions to Section f proposed in this rebuttal, there is a need to also make changes to Section g of Attachment B.

Q. Does BPA propose any changes to Section F(1)(a) of Attachment B?

A. Yes. BPA proposes that one deletion proposed by the JCG in Attachment B on page 3 be retained rather than being deleted. The proposed deletion reads as follows: "The LB CRAC does apply to the 1,000 average megawatt (aMW) of power deliveries made under the power sale portion of the Residential Exchange Program (REP) Settlement, including where such power sales are converted to cash payments calculated pursuant to Section 5(b) of the REP Settlement Agreement."

Q. What is BPA's rationale for not deleting this sentence?

A. BPA believes that this is an important part of the complete statement about what the LB CRAC does and does not apply to that was reached as part of the Partial Settlement.

Q. Is BPA proposing to make changes to any definitions in Section b?

A. Yes. BPA is proposing number of changes to the definitions contained in Section F(1)(b) of Attachment B of the JCG testimony. Most of these proposed changes are a result of BPA's proposed replacement of Section F(1)(f) of Attachment B with Section F(1)(f) of Attachment A.

Q. What change to AAMTA is BPA proposing?

A. There is one minor change, replacing Section g with Section f(1). BPA proposes to reference the correct section in which this calculation occurs.

Q. What is BPA's proposed wording of APP?

A. BPA's proposed wording reads as follows: "'Augmentation Pre–Purchase' means the quantity of power under a contract or other binding obligation entered into by BPA at least 120 days prior to the first day of the next 6-month period for the delivery of AAMTF for a given month."

Q. What is BPA's proposed change to the definition of APPA[NS]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What is BPA's proposed change to the definition of APPA[S]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What change is BPA proposing to the definition of MSC?

A. "'Monthly System Capability' means the monthly value obtained by shaping the firm system capability to BPA's firm monthly loads, where firm system capability equals 7,070 aMW of Federal Columbia River Power System (FCRPS) capability, less the amount of such capability sold to Slice purchasers. A separate shape will be produced for each separate year in the rate period. These monthly amounts of MSC are established once in the Supplemental Rate Case ROD."

Q. What change is BPA proposing to the definition of NACA?

A. BPA proposes to retain this definition in its present form.

Q. What change does BPA propose to NACA[NS]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What change does BPA propose to NACA[S]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What change does BPA propose to the definition of NACDIFF?

A. BPA proposes to retain this definition in its present form.

Q. What change does BPA propose to PRICEA[NS]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What change does BPA propose to PRICEA[S]?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What is BPA's proposed wording of the definition of SALESMAYAUG?

A. "(SALESMAYAUGA) 'Actual Sales of Existing Augmentation Quantity' means the resale of augmentation of 1,282 aMW plus [(actual Direct Service Industrial Customers (DSI) load/1486) * 450]."

Q. What is BPA's proposed wording of the definition of SALESMAYAUGF?

A. "(SALESMAYAUGF) "Forecasted Sales of Existing Augmentation Quantity" means the resale of augmentation of 1,282 aMW plus [(forecasted DSI load/1486) * 450]."

Q. Why is BPA proposing new definitions for SALESMAYAUGA and SALESMAYAUGF?

A. Since SALESMAYAUG may now vary before and after a six-month period, there are now two definitions of this term.

Q. Why is BPA proposing a change in how these are determined?

A. This issue was left unresolved during discussions leading up to the partial rate case settlement and subsequent workshops. BPA presented an earlier version of a definition of SALESMAYAUG that included the ability for variation in the amount of DSI load included in the calculation of SALESMAYAUG. The JCG proposed to fix

SALESMAYAUG at 1,732 aMW. The approach the JCG proposes does not recognize the reduced sales revenues at $28.10/megawatthour (MWh) that result from reductions in sales at the Industrial Firm Power Targeted Adjustment Charge (IPTAC) rate. The approach proposed by BPA is intended to allow for a reduction in SALESMAYAUG as sales at the IPTAC rate change.

Q. What change does BPA propose to the definition of TCAPPA(NS)?

A. BPA proposes to change TCAPPA(NS) to TCPPA. Also, the definition would then read as follows: "'Total Cost of Augmentation Pre-Purchases Actual' means the actual total cost of the APP made for a month." This is a result of replacing Section f.

Q. What change does BPA propose to the definition of TCAPPA(S)?

A. BPA proposes deleting this definition. As a result of replacing Section f, this definition is no longer necessary.

Q. What change does BPA propose to Section F(d)(3)?

A. BPA proposes to change the wording to the following: "TAUGCF includes all BUYDOWN and OC contracted for by the date of this calculation that apply to any portion of the six-month period for which these calculations are being performed. This also includes the values of DIURNALACF. As a result, the TAUGCF will be determined as follows: TAUGCF = Sum of the values of DIURNALACF + BUYDOWN + OC.

Q. What change does BPA propose to make in Section f?

A. BPA proposes to entirely replace Section f. The method proposed for Section f in Attachment B by the JCG does not assure that non-Slice customers assume all cost changes associated with replacing the 120-day rule with the 0-day rule. The approach proposed by BPA did assure this result.

Q. Please explain.

A. To illustrate the problem with using the approach to Section f proposed by the JCG, BPA has developed the following two tables. Table Illustrating JCG Method is a numerical

example illustrating the calculations in Section f and g proposed by the JCG. Table Illustrating BPA Method is a numerical example illustrating the calculations for Section f and g proposed by BPA.

Table Illustrating JCG Method

Category	Slice	Non-Slice
Pre-purchase – 120 day rule	$2M	$2M
Pre-purchase – 0 day rule	N/A	$1M
Short position	$3M	$2.2M
Buydown	$1M	$1M
Total	$6M	$6.2M
Percent of CRAC'able revenue	30	70
Total LB CRAC Cost	**$1.8M**	**$4.34M**

Table Illustrating BPA Method

Category	Slice	Non-Slice
Pre-purchase – 120 day rule	$2M	$2M
Short position	$3M	$3M
Buydown	$1M	$1M
Total	$6M	$6M
Percent of CRAC'able revenue	30	70
LB CRAC Costs	$1.8M	$4.2M
Pre-purchase 0 day rule	N/A	+$1M
Short position 0 day rule	N/A	- $0.8M
Total LB CRAC Costs	**$1.8M**	**$4.4M**

Q. Why does BPA consider this to be a significant enough difference to make such a substantial change to Section f and some change to Section g of the JCG testimony (WP-02-E-JCG-02)?

A. In this example, there is a difference of $0.06M in the cost to non-Slice. The amount of difference and whether it is to the advantage or disadvantage of non-Slice customers depends on the actual numbers used in the two alternative approaches to Section f and Section g. However, this example is illustrative of the reason why BPA is proposing to replace Section f and make some changes in Section g as a result of the proposed replacement of Section f.

Q. What is the simplest way to revise Section f of the JCG testimony (Brattebo, et al., WP-02-E-JCG-02)?

A. The simplest approach is to replace Section f in Attachment B with Section f in Attachment A (this actually is mis-identified as Section e beginning near the bottom of page 16 of Attachment A).

Q. *Does BPA propose any other changes to Attachment B of the JCG testimony (Brattebo, et al., WP-02-E-JCG-02)?*

A. Yes. Some proposed revisions to Section g that are contained in Attachment B need to be changed.

Q. What is BPA's proposed change to Section g of the JCG testimony (Brattebo, et al., WP-02-E-JCG-02)?

A. BPA proposes to replace Section g from Attachment B with Section g from Attachment A.

Q. Has BPA attached its proposed revised version of the GRSPs to this rebuttal testimony?

A. Yes. It is Attachment A at the end of this panel's rebuttal testimony.

2. Rebuttal of Issues Raised by Springfield Utility Board

Q. Springfield Utility Board (SUB) states that "BPA does not propose to change the cost of the 496 aMW of DSI service based on higher expected market prices." Nelson, WP-02-E-SP-02, at 3, lines 18-19. Do you agree?

A. No. The 496 aMW is part of the amount that would be included in determining the augmentation requirement, denoted AAMTF and AAMTA in the GRSPs. Also, once AAMTF and AAMTA are determined, the cost of meeting these amounts are then a part of the calculation of the LB CRAC. Then, the LB CRAC is applied to the Industrial Firm Power (IP) rate and as a result, all sales to the DSIs that are from rate schedules subject to the LB CRAC are affected.

Q. SUB argues that BPA's proposed LB CRAC methodology does not provide for a change in BPA's augmentation amounts to reflect retail load loss of Slice/Block customers while at the same time reductions in retail load do result in a reduction in BPA's augmentation amount. Nelson, WP-02-E-SP-02, at 14, lines 14-23. Do you agree with this assessment?

A. Yes.

Q. SUB further asserts that as a result of the circumstances described in the previous question, that there is a cost shift from Slice/Block customers and to customers for whom BPA provides load following products. Nelson, WP-02-E-SP-02, at 14, line 26. Do you agree?

A. No. BPA's proposed LB CRAC methodology reflects the load responsibility that BPA bears under the various power products. Changes in retail load for Slice/Block do not necessarily translate into reductions in BPA's augmentation responsibilities. Reductions in retail load for customers for which BPA does provide load following services does translate into a change in BPA's augmentation responsibilities. However, it is incorrect to use this fact as the foundation for a conclusion that there is a shift of costs from

Slice/Block customers and to customers to whom BPA provides load following services in the design of the LB CRAC methodology.

Q. Please elaborate.

A. SUB argues that the source of this cost shift is that Slice/Block customers that experience retail load loss wind up with excess resources to sell and that non-Slice customers would be paying for the Slice/Block customers' ability to have these excess resources. What the LB CRAC methodology does is reflect the power products customers may choose between. The LB CRAC methodology does not create the "cost shift" SUB asserts exists. What SUB asserts is a "cost shift" is simply a result of the different services BPA provides under different power products.

Q. SUB proposes a method by which the LB CRAC calculations for Slice and non-Slice would be calculated to reflect load loss from Slice and non-Slice separately. Nelson, WP-02-E-SP-02, at 15, lines 1-10. Do you agree with this proposed method?

A. No. BPA determines the need for additional market purchases to meet load by subtracting expected loads from FCRPS output, as these amounts are defined in the GRSPs. BPA buys resources to meet load, not to meet the load of one separate set of customers. As a result, BPA has proposed an LB CRAC methodology that reflects this principle.

Q. SUB states that "…BPA's position on the LB CRAC appears to be moving away from a mechanism to recover actual augmentation costs to a mechanism that recovers estimated augmentation costs." Nelson, WP-02-E-SP-02, at 15, lines 22-24. Do you agree?

A. No. The GRSPs are very clear that estimated augmentation amounts and costs are used to develop the LB CRAC rates before a six-month period and actual augmentation amounts and costs are used to determine any refunds or added charges after the close of a six-month period.

Q. SUB argues that if the LB CRAC under-recovers revenues it is more likely that other CRAC mechanisms will trigger. Nelson, WP-02-E-SP-02, at 16, lines 1-2. Do you agree?

A. Absolutely not. The point of the after-the-fact calculations of LB CRAC about 90 days after the close of a six-month period is to determine if there has been an over- or under-recovery of revenue from the LB CRAC. If there has been an under-recovery, the GRSPs detail how BPA will determine the additional charge for each specific customer necessary to collect this under-recovery without resorting to other CRAC mechanisms.

Q. SUB proposes an annual review of the LB CRAC mechanism to assure that it is recovering actual augmentation costs and to make any necessary changes in its design. Nelson, WP-02-E-SP-02, at 16, lines 4-14. Do you agree?

A. No. The GRSPs lay out how BPA has proposed to determine *twice* each FY whether BPA is collecting too much or too little revenue from the LB CRAC. This determination is made to assure that actual augmentation costs are being collected. Procedures to refund or debit customers for a refund or added charges are also identified. BPA sees no advantage to doing this assessment once annually. In addition, BPA sees no reason to introduce uncertainty regarding the design of the LB CRAC by allowing that design to potentially change annually. This would appear to be moving in the direction of having the LB CRAC be a moving target - a concern that SUB has raised. The solution to over- or under-recovery is not to change the LB CRAC design, it is to have a method in place as a part of that design that assures that customers bear the over- or under-recovery.

Q. SUB argues that there exists a chance that BPA has not properly deducted base revenues against the gross costs of augmentation in its ToolKit modeling. SUB believes this is possible since BPA had not provided proof positive that its calculations of the net cost of augmentation actually incorporated the revenue from the sale of the power whose costs –

net costs – are to be recovered by the LB CRAC. Nelson, WP-02-E-SP-02, at 11, line 13 through 12, line 6. Is it possible that BPA miscalculated net costs?

A. No. BPA ensured that the net costs were properly calculated. The gross costs were calculated, and from those costs, several offsets were subtracted: the resale revenues for both IP and Priority Firm Power (PF) loads, and the costs that had already been assumed (and consequently covered by) the May Proposal. Here is the calculation of net augmentation costs. For load references, *see* Documentation to Supplemental Proposal Study, WP-02-E-BPA-69, at 5-23 through 5-25.

For FY 2002:

Start with "BPA Loads minus Slice loads" (Table C, Page 5-25)	8,530 aMW
BPA critical FBS shaped to load (Table C, Page 5-25)	5,070 aMW
Load minus BPA critical FBS	3,460 aMW
System Augmentation Purchase Required (3460/(1-0.282))	3,560 aMW
System Augmentation Purchased Before 8/1/00	821 aMW
System Augmentation Purchased Between 8/1/00 and 12/31/00	195 aMW
Total Augmentation Purchased as of 12/31/00	1,016 aMW
(Supplemental studies mistakenly applied losses to the 195 aMW purchase resulting in a total of 1,010 aMW)	
System Augmentation Remaining to be Purchased @ Market	2,544 aMW
(Used 3,560 – 1,016, …2,550 aMW in Supplemental Proposal).	
Purchase Expense for 2,544 aMW @ $210 … =	$4,635,100,000
(Sum of Monthly Purchase * Price, From RevSim Model)	
Expense for Purchases up to 12/31/00 ……=	$ 266,700,000
Total (Gross) Purchase Expenses ...……. =	**$ 4,901,800,000**
Revenue From DSIs (496*8760*23) ……. =	$ 100,000,000
PF Revenue ((3560*.972)-496)*8760*19.26 =	$ 500,000,000
Net Costs recovered from May Rates:	
DSI = 450*8760*(28.1-23.0) =	$20,100,000
PF = 1309*8760*(28.1-19.26) =	$101,400,000
Total Net Cost Recovered from May Rates =	$121,500,000
Cost of System Augmentation to be Recovered Through the LB CRAC=	
$4,901,800,000 – 100,000,000 – 500,000,000 – 121,500,000 =	***$4,180,000,000***

3. Rebuttal of Issues Raised by Industrial Customers of Northwest Utilities

Q. The Industrial Customers of Northwest Utilities (ICNU) argue that the current approach to LB CRAC design results in higher secondary revenues from higher market prices, which flow to BPA as increases in cash reserves. Wolverton, WP-02-E-IN-02, at 6, lines 10-13. Do you agree?

A. Not necessarily. ICNU is actually arguing that secondary energy used to meet augmentation should be priced at zero cost in the LB CRAC calculation. BPA's approach in the LB CRAC is to determine the LB CRAC rates by using the cost incurred to pre-purchase power to meet augmentation and also to include as a cost an amount of money expected to be needed to cover any monthly shortfalls between pre-purchased power and monthly augmentation amounts. Since at the start of a six-month period, BPA is not aware of the amount of actual load that will appear during the six-month period, nor the actual amount of augmentation that will be required during the six-month period, nor the actual amount of secondary that will be available to help meet actual augmentation, it is not appropriate for BPA to simply assume that some amount of expected augmentation will be met at zero cost through the use of secondary energy. It is not until after the close of a six-month period that these amounts become known. Only then is BPA able to determine the amount of secondary actually used to meet augmentation.

Q. ICNU argues secondary revenue credit ought to be included in the rate increase calculation of the LB CRAC for October 1, 2001. Wolverton, WP-02-E-IN-02, at 7, lines 1-5. Do you agree?

A. No. In BPA staff's professional opinion, this would not be a wise decision. Because of the type of problem presented in the answer to the previous question, adopting ICNU's proposal would essentially place greater cost recovery risk for meeting augmentation needs on tools other than the one tool expressly designed to cover that risk, LB CRAC.

Q. ICNU argues that the expected level of secondary revenues ought to be considered as mitigation for the rates that BPA sets through the LB CRAC every six months. Wolverton, WP-02-E-IN-02, at 9, lines 4-10. Do you agree?

A. No. First, this is really an issue of what price BPA ought to apply to determine the cost of meeting the monthly augmentation amount that has not been met through pre-purchases, when BPA goes into the month "short." In BPA's view, it is more fiscally responsible to devise a method that assures that BPA is compensated for any purchases required to meet the monthly augmentation amount, as that amount is determined in the GRSPs. Quite apart from the design of the LB CRAC, BPA believes that a better way to reflect secondary revenues that may result in "excess" revenue is to credit back any such excess in the design of the DDC.

B. Financial-Based Cost Recovery Adjustment Clause

Q. JCG proposes three changes to the GRSPs related to the FB CRAC. The first is to specify that the contractually committed sales to the seasonal and irrigation mitigation products are recognized as exempt from the FB CRAC. See Brattebo, et at., WP-02-E-JCG-02, at 9. Is this an acceptable change?

A. Yes.

Q. The second proposed change is to specify that forecasted revenues from the Slice Cost true-up will be included in the revenue forecast when determining the FB CRAC. Id. at 10. Is this an acceptable change?

A. Yes, with the understanding that any such true-up could result in either an overall increase or decrease in Slice revenues. This means, then, that the change in these forecasted "revenues" could be either positive or negative.

Q. The third proposed change is to require BPA to take actions if Audited Accumulated Net Revenues (AANR) at the end of a FY are within $150 million of the FB CRAC threshold for the subsequent year. These actions include preparing and posting on its web site an

analysis for the causes of BPA's financial decline compared to the rate case plan, and proposing a prioritized list of potential actions to avert or mitigate the need for the FB CRAC. BPA shall also conduct a public comment period on these actions. Id. at 10; and Attachment B, at 27. Is this an acceptable addition?

A. Yes. BPA included this provision in the May Proposal. This provision was not included in the Amended Proposal because the FB CRAC design was such that this provision would trigger so far before the date the FB CRAC could trigger that it would not be very meaningful. It is acceptable to BPA to include this provision in the FB CRAC as currently designed.

Q. *The Direct Service Industrial Customers (DSIs) and Alcoa state that "if the FB CRAC triggers in the first year of the rate period (FY 2002), BPA would be allowed to collect whatever amount is necessary to restore FY 2002 net revenues to the threshold level . .." See Schoenbeck and Bliven, WP-02-E-DS/AL-01, at 5, lines 8-11. Is this correct?*

A. Not quite. If the FB CRAC is implemented in the first year of the rate period, it will trigger based on a forecast of FY 2001 ending accumulated net revenues. The amount that can be collected is the difference between the threshold for ending FY 2001 and the ending FY 2001 accumulated net revenues forecast. This is the amount that would have been necessary to restore the ending FY 2001 reserves to the threshold level. However, this amount will be collected during FY 2002, and will add to FY 2002 net revenues. It will not restore the FY 2002 net revenues to a particular level such as the FB CRAC threshold level, and it will have no effect on ending 2001 accumulated net revenues.

Q. *JCG has proposed changing the language relating to the timing of the determination that accumulated net revenues are below the FB CRAC Threshold. They proposed changing*

from "In August prior to each year of the rate period" to "In August of each year of the rate period." See Brattebo, et al., WP-02-E-JCG-02, at 26. Is this change acceptable?

A. No. The determination for triggering the FB CRAC in October of any year of the rate period is made in August prior to the beginning of the year. So the first determination will be made in August 2001, which is not within the rate period. Therefore the original wording is more accurate.

Q. SUB argues that "Slice customers should participate in the FB CRAC in the first year. To do otherwise would result in non-Slice customers paying for BPA's financial difficulties which occurred prior to the rate period while the Slice customers pay nothing to bring BPA back to financial health." Nelson, WP-02-E-SP-02, at 14, lines 5-8. Do you agree?

A. No. With the design of BPA's Supplemental Proposal, those customer taking the Slice product do not participate in the FB CRAC, but they also are not eligible for the DDC. So if BPA were starting the rate period with a high level of reserves, the Slicers would not get the benefit of any subsequent rebate. Likewise, if the FB CRAC is implemented in the first year, the Slicers will not participate. BPA believes this is an equitable trade-off.

C. Safety-Net Cost Recovery Adjustment Clause

Q. The JCG proposes two changes in the Safety-Net (SN) CRAC. The first parallels their proposed change for the FB CRAC. They propose clarifying that seasonal and irrigation mitigation products are exempt from the SN CRAC. Their second proposed change is a clarification that the SN CRAC has its effect by modifying the FB CRAC parameters. See Brattebo, et al., WP-02-E-JCG-02, at 10, line 21 through 11, line 2. Are these changes acceptable?

A. Yes.

Q. NWEC/SOS argues that, due to the lack of a 5-year forward look, the SN CRAC (and the Dividend Distribution Clause, or DDC) developed in the Supplemental Proposal will not be effective as a risk mitigation tool. Weiss, WP-02-E-NA/SA-0,3 at 8. Is this true?

A. No. It is true that the current SN CRAC design could trigger, at most, just under a year before an anticipated Treasury deferral. Therefore it is not likely to enable BPA to avoid the deferral, and it is questionable whether a forward-looking SN CRAC would provide much of an advantage.

Q. Please elaborate.

A. In its direct testimony, NWEC/SOS asserts "BPA's proposed SN CRAC triggers only a few months in advance of an actual Treasury deferral. Thus it cannot anticipate serious problems soon enough to affect the TPP… One would think that recent events would have taught Bonneville that such limits can be disastrous… Only if the SN CRAC is forward looking can it react in time to actually have an affect (sic)." *Id.*

The Supplemental Proposal reflects a negotiated Partial Settlement Agreement between BPA and its customers and, as such, its provisions must be understood in relation to one another. The first year "uncapped" FB CRAC and the LB CRAC allow BPA to collect a substantial sum of money up front in the rate period and permit semi-annual true-ups to market prices and actual megawatt (MW) for augmentation load. The DDC was modified to be an automatic rebate to customers, should BPA's financial position improve, which helps customers mitigate the effects of their rate increases. The SN CRAC presented in the Supplemental Proposal, triggered by a deferral or 50 percent likelihood of one within the FY, is the only SN CRAC design on record. Any proposed forward look NWEC/SOS may have envisioned might have been the subject of informal discussions but was not formally presented as a participant contribution to the Amended or Supplemental Proposals. While there might be some advantages to a forward-looking SN CRAC, there are also formidable technical and practical problems associated with it

that are much less pronounced with the current design. As NWEC/SOS knows from its active role in the settlement discussions, the SN CRAC was never considered in the settlement talks as an effective means of increasing TPP. Its function was repeatedly characterized as a means to prevent a string or series of deferrals overtime.

From a strictly technical standpoint, to expect that a forward-looking provision of the SN CRAC would be effective, there must be some reason for believing the events of greatest concern could actually be foreseen and acted upon in a timely fashion. What recent events have taught BPA, and, more generally, participants in the West Coast power market, is that markets are highly volatile and that forecasts of their expected behavior may become obsolete virtually overnight. Considering that market price forecasts prepared in Spring 2000 were unable to predict or even anticipate the magnitude of change that actually occurred in late summer and fall of that year, it is unreasonable to expect that a forward look conducted one to five years earlier would have prepared the region for the sudden shift in prices that actually occurred. Put differently, had BPA been able to implement some form of SN CRAC for the FY 1996-2001 rate period, it would have made little difference whether or not it was forward-looking in terms of its ability to deal with the problems the region is facing currently.

This inability to forecast major events or outcomes of decisions accurately beyond a short time horizon would create a significant practical problem during SN CRAC implementation. It is difficult to get agreement on what rates should be when working with forecasts of "expected" outcomes. Attempting to justify a significant increase in rates based upon a forecast of "surprise" events several years in advance might prove impossible. The short forward look of the current design greatly increases the likelihood of consensus regarding which factors justify rate increases and what the appropriate response should be.

Q. CRITFC argues that "the SN CRAC must address cash flow problems." Sheets, et al., WP-02-E-CR/YA-06, at 24, lines 13-14. Do you agree?

A. No. The SN CRAC is specifically designed to address one particular cash flow problem, the need for cash to make a year-end payment to the Treasury or other creditors. However, there are some cash flow issues that any rate design is incapable of addressing. One such issue is the existence of the Energy Northwest net billing agreements, and how they affect BPA's cash flows. The impact of net billing is that most of the revenue billed by BPA to its public customers in the fall results in cash payments by those customers to Energy Northwest. Thus, increasing the rates charged to those customers would do nothing to increase the cash flow to BPA in the fall. Solutions to cash flow problems must be found elsewhere than in rates.

Section 4. Dividend Distribution Clause

Q. JCG proposes changing the wording of how AANR are determined, from "the determination of AANR will be confirmed by BPA's independent outside auditing firm." See WP-02-E-BPA-68, at 17. The proposed language is "As Part of BPA's annual audit process, BPA's independent outside auditing firm will confirm that BPA's AANR determination was consistent with applicable criteria. This confirmation will be made in accordance with additional agreed upon procedures established by BPA and its independent outside auditing firm after consultation with interested parties." Brattebo, et al., WP-02-E-JCG-02, Attachment B, at 31. Is this change acceptable?

A. Yes. This is, for the most part, a clarification of the intention of the earlier language. BPA intends to use a portion of the June 2001 workshop, held for the purpose of discussing the LB CRAC adjustment for October 2001-March 2002, to explain to interested parties the agreed upon procedures BPA proposes to use.

Q. JCG proposes to change the distribution of the DDC in the last year of the rate period, so that the full amount will be collected prior to the end of the rate period. See Brattebo,

et al., WP-02-E-JCG-02, at 11, lines 8-12, and Attachment B, at 33. Is this change acceptable?

A. In general, yes, though BPA proposes a related modification in the timing of the DDC. The Joint Customer proposal reflects full distribution of the full amount of the DDC in the last year of the rate period, which reflects how the DDC is being modeled in ToolKit. BPA staff finds this change acceptable, but proposes that in each year of the rate period, if there is a rebate under the DDC provisions, it be distributed beginning with the bills for April power deliveries. This would put any adjustment due to the DDC on the same timing as the LB CRAC adjustment and an FB CRAC true-up, if any. So any DDC distribution in the last year of the rate period would be credited on customers bills for April through September, one-sixth of each customer's share each month.

Section 5. Implementation of Fish and Wildlife Funding Principles

Q. Both CRITFC and NWEC/SOS argue that BPA's proposal does not meet the Principles, specifically Nos. 3 and 4. See Sheets, et al., WP-02-E-CR/YA-06, at 21, and Weiss, WP-02-E-NA/SA-03, at 8. Do you agree?

A. No. BPA's Supplemental Proposal implements the Principles. *See* May ROD, WP-02-A-02, Section 5.4 for discussion of how the May Proposal was designed to implement the Principles. *See* also Section 6 of this testimony for additional discussion of how the Supplemental Proposal's redesigned CRAC further addressed the Principles.

Q. Both CRITFC and NWEC/SOS argue that BPA's proposal ignores the potential increase in costs due to the 2000 Biological Opinion. NWEC/SOS states "An updated probabilistic estimate of the new BiOp costs should be substituted for the now-outdated 18 fish alternatives." Weiss, WP-02-E-NA/SA-03, at 15, lines 7-8. CRITFC/Yakama states "Those [fish and wildlife funding] obligations have been determined, yet BPA has not

adjusted its proposal to address the added costs." See Sheets, et al., WP-02-E-CR/YA-06, at 4, lines 16-18. Do you agree?

A. No. CRITFC testimony erroneously implies that there is knowledge of, and agreement on, the level of "the added costs." At this time, although the 2000 Biological Opinion and Recovery Strategy have been released, and the actions to be taken have been determined, implementation plans are not complete. These implementation plans, which are currently being developed, will include a prioritization of the actions, a schedule for each action, a determination of the source of funding for each action, and the estimated costs for each agency. The implementation plans are expected to be completed in late April 2001. So at this time, their costs have not been fully determined.

BPA staff has not "ignored" the Biological Opinion, as claimed by CRITFC (WP-02-E-CR/YA-06, at 6, lines 7-9). Rather, BPA has estimated the potential costs to BPA for fish and wildlife (other than those related to hydro operations) related to the Biological Opinion, and the costs are well within the range assumed in the 13 Fish and Wildlife Alternatives (Alternatives) developed in conjunction with the Principles ($352 million per year, within a range of $272 million to $417 million). The 'operations' components of the Alternatives are included in BPA's Supplemental Proposal using the current market forecast. It therefore includes much higher operating costs than those in the May Proposal.

CRITFC has also developed estimates of BPA's costs related to the Biological Opinion, which they cite frequently in their testimony (WP-02-E-CR/YA-06, at 10-13). For example, CRITFC argues that BPA's costs for fish and wildlife will average $625 million per year, which is an increase of $354 million average per year beyond what is assumed in the rate proposal. However, CRITFC's estimates are based on their assumptions about such things as how long it would take to go through all the steps necessary to have an investment placed into service, and therefore become a repayment

obligation, and which agencies will be responsible for which obligations. BPA believes CRITFC's estimates reflect unrealistic expectations in some categories, particularly for activities that will occur in FYs 2001 and 2002. Their assumptions include both higher funding levels than BPA believes are necessary to implement activities, and faster implementation timelines than BPA believes are likely. These assumptions can have the effect of showing much more cost to BPA much sooner than BPA believes will occur. CRITFC's estimates have not been validated by BPA or other Federal agencies. The cost estimates BPA has developed represent a reasonable judgement of the activities BPA will undertake to meet its Endangered Species Act (ESA) and Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) fish and wildlife responsibilities, and the schedule for implementation. No consensus currently exists on schedule, level of costs, or who will be obligated for which costs.

Q. *Both CRITFC and NWEC/SOS argue that BPA's proposal does not adequately address potential costs under the Clean Water Act (CWA), since a recent court decision regarding the U.S. Army Corps of Engineers (COE) dams on the Snake River and compliance with the CWA. Weiss, WP-02-E-NA/SA-03, at 5, line 24, 6, line 3; Sheets, et al., WP-02-E-CR/YA-06, at 6, lines 10-14. Do you agree?*

A. No. In the court decision referred to, *National Wildlife Federation v. Army Corps of Engineers*, the court remanded the case to the COE for additional investigation and explanation. It ordered the COE to "issue a new decision replacing the 1998 Record of Decision which addresses its compliance with its legal obligations under the Clean Water Act." In response to the court's order, as well as to the National Marine Fisheries Service's new biological opinion issued on December 21, 2000, the COE is preparing a new Record of Decision.

The court did not order particular measures, nor did it order *compliance* – it ordered further *addressing* of compliance. Identification of the particular measures to

implement will be in the Water Quality Plan (Appendix B of the NMFS 2000 Biological Opinion on the FCRPS). Subsequent implementation will take place over a period of years. Once Federal agencies decide to implement particular measures, the cost of those actions will be determined. The schedule on which any actions will be implemented must also be determined, taking into account all the necessary steps such as getting Congressional approval and the time it takes to construct the projects. A determination will also be made regarding which agency is responsible for what funding. BPA's proposal, which incorporates the 13 Alternatives used during the development of the Principles, already accommodates a wide range of fish and wildlife costs, including CWA-related costs. Whether the lawsuit results in costs to BPA in excess of this range during the FY 2001-2006 rate period cannot be known at this time.

Q. *CRITFC/Yakama claims that by "ignoring this important new information [2000 Biological Opinion] Bonneville has underestimated the risk it faces and increased the probability that it will not be able to meet its costs and fully repay the Treasury." Sheets, et al., WP-02-E-CR/YA-06, at 7, lines 5-7. They also state that BPA's reliance on the Principles exposes BPA to significant risks. BPA should use the CRITFC estimates, and probabilities that costs will exceed those estimates. Id. at 14. NWEC/SOS states that "Each of these two events [the Biological Opinion and the court order regarding CWA] could have enormous cost impacts on Bonneville. To not consider the consequences to the agency of these two events, while reacting to others, certainly violates sound business practices." Weiss, WP-02-E-NA/SA-03, at 6, lines 2-4. Do you agree?*

A. No. As stated in the previous two responses, there has been no agreement on what the costs to BPA will be from either event, nor has there been agreement on what fraction of these costs will be incurred by BPA within the FY 2002 through 2006 rate period. BPA has not "ignored" the new information. Rather, BPA staff has considered BPA's

potential costs related to the Biological Opinion and CWA, and has determined that the range and probabilities used in the 13 Alternatives are sufficient.

Q. *According to CRITFC, at 14, line 19 to page 15, line 16, there is a significant probability that BPA costs will be higher because other agencies will not be able to secure appropriations. "BPA must do a probability analysis of these likelihoods in order to adequately assure repayment to Treasury." Id. at 15, lines 15-16. Do you agree?*

A. No. BPA is committed to paying all its fish and wildlife obligations once those obligations are determined. However, BPA does not intend to assume the obligations of other agencies. BPA does not agree with CRITFC's assumption that because other agencies may not receive the funding or appropriations to fund and implement their obligations under the Biological Opinions, those obligations will therefore become BPA's obligations. In the professional judgement of BPA staff, this is not a significant risk that must be modeled.

Section 6. Treasury Payment Probability

Q. *CRITFC claims they previously raised issues that BPA did not adequately address in its May Proposal, and they have not been addressed in BPA's Supplemental Proposal. Sheets, et al., WP-02-E-BPA-CR/YA-06, at 2, lines 8-10. Do you agree?*

A. No. BPA addressed CRITFC's issues in the May Proposal. *See* May ROD, WP-02-A-02, primarily Section 2.4, Section 5.4, and Chapter 7.

Q. *CRITFC contends that BPA's Supplemental Proposal is insufficient to maintain a high TPP for a variety of reasons. For example, they argue that BPA should be modeling the probability that any CRAC would not trigger and be implemented as designed, and therefore not provide all of the revenues BPA assumed, since "BPA has never*

successfully implemented any CRAC," and BPA has never designed and implemented a "mini 7(i)" rate case. Sheets, et al., WP-02-E-CR/YA-06, at 23. Do you agree?

A. No. BPA has never attempted to model every conceivable type of risk it faces. In BPA's Risk Analysis Study, BPA identifies **key** risks. *See* WP-02-FS-BPA-03, at 1, line 18. Some types of risk are not appropriate to be modeled, such as risks for which other appropriate responses are in place. Some risks are such that they can not be modeled. Further, some of the "risks" that are not modeled are upside risks that would benefit BPA, such as bond refinancings. BPA may pursue refinancings in the future, when conditions are such that BPA would benefit financially. Such "risks" have never been included in the risk modeling. The fact that some risks to BPA are not being modeled, some which would benefit BPA and some which would not, does not in itself demonstrate that BPA's proposal has an insufficient TPP.

Additionally, there is no reason to model the probability that the SN CRAC would not operate as designed, since the SN CRAC is not included in modeling. BPA has asserted that the SN CRAC increases the security of its obligations to the Treasury, and increases the likelihood that ending FY 2006 reserves will be adequate to meet the requirements of Principle No. 4. Since CRITFC has not argued that the SN CRAC will have any specific numerical impact, but has made only a qualitative assertion, explicitly considering a risk of problems with the implementation of the SN CRAC would change neither BPA's quantitative modeling results nor the nature, strength, and truth of BPA's qualitative assertions.

Q. NWEC/SOS claims that the Supplemental Proposal is not fully meeting Principles Nos. 3 and 4 because it has a TPP of less than 88 percent. Weiss, WP-02-E-NA/SA-03. Is this correct?

A. No. While the TPP values in the Supplemental Proposal range between 82.7 and 85.9 percent (assuming that BPA's total Slice sales are 2,000 aMW), several rate design

changes made since the publication of the May Proposal allow BPA to satisfy both Principles 3 and 4 in spite of the lower TPP. *See* Burns, *et al*., WP-02-E-BPA-70, at 8-9.

Q. Please elaborate.

A. In direct testimony, the witness for NWEC/SOS, in evaluating the effectiveness of the SN CRAC in the Supplemental Proposal, makes the following argument:

> "In WP-02-E-BPA-13, p. 22 BPA asks '*Why is 88 percent being targeted rather than the 80 percent or some intermediate percent allowed by Principle No. 3?'* Its answer: 'An 88 percent is being targeted in order…to fully meet both Principle No. 3 and No. 4.' However, now Bonneville states that the SN CRAC would have little effect on its TPP, but is only adequate to meet the … purpose of avoiding multiple deferrals: 'SN CRAC…would not significantly affect the calculation of TPP…. The SN CRAC is not likely to trigger in time to prevent a missed Treasury payment, but is instead more likely to help avoid a second miss.' (WP-02-E-BPA-67, at 5-12) Therefore one must conclude that since the SN CRAC will not affect TPP, Bonneville is admitting that it is not fully meeting the Principles, because its Proposal has a TPP less than 88 percent." (Weiss, WP-02-E-NA/SA-03, at 7).

If one examines the dynamics of the ToolKit model used to calculate TPP, however, it becomes evident that by avoiding multiple deferrals, BPA increases the likelihood that BPA will satisfy the Fish Principles. Principle No. 3 requires that BPA demonstrate a probability that it makes its Treasury payment on time and in full over the 5-year rate period at least equal to the 80 percent level established in the 1996 Rate Case, and will seek to achieve an 88 percent level. The fact that TPP values in the Supplemental Proposal fall between 82.7 and 85.9 percent by itself satisfies Principle No. 3. Principle No. 4, however, requires that BPA design rates and contracts that position BPA to achieve a similarly high probability (*i.e.*, 80-88 percent) for the post-2006 period by building financial reserve levels and through other mechanisms. (*See* Volume 1, Chapter 13 of Documentation for Revenue Requirement Study, WP-02-E-BPA-02A, at 344.) At the time of the May Proposal, with less augmentation load, far lower market price projections, and a much less robust CRAC design than in the

Supplemental Proposal, BPA argued strongly for strict adherence to the 88 percent standard, and the TPP analysis associated with the May Proposal achieved that level. The rationale for this adherence was detailed in BPA's direct testimony for the May Proposal: "[C]onditions prevailing in the 1993 and 1996 rate cases that caused the Administrator to target a lower TPP than 88 percent are not present now. Indeed, BPA's costs are significantly below market price expectations…. In the judgment of the Administrator and concerned Executive Branch agencies, Principle No. 4 would not be satisfied if the 88 percent TPP goal in Principle No. 3 were relaxed." (*See* WP-02-E-BPA-13, at 26-27.)

Although it is obvious that a dramatic change in market price expectations has occurred since the May Proposal was drafted, BPA has not abandoned its goal of 88 percent. While the Supplemental Proposal TPP values fall somewhere in the middle of the 80-88 percent range, BPA is exploring non-rate design options that should move it closer to the 88 percent goal. However, even without these options, the addition of the SN CRAC allows the Supplemental Proposal to satisfy Principle No. 4 even if the TPP modeled in ToolKit falls below 88 percent.

Q. How is this possible? Does not a lower TPP mean that BPA will start the next rate period in a worse situation?

A. Not necessarily. What is more important to the satisfaction of Principle No. 4 is how BPA ends the FY 2002–2006 rate period. To demonstrate this, it is necessary to take closer look at how BPA determines its TPP and how implementation of the SN CRAC would be expected to affect deferrals.

BPA calculates TPP by determining the percentage of 3,900 ToolKit games that are free of deferrals for all five years in the rate period. By setting the standard in this fashion, the ending reserve values in a single ToolKit game need to fall to $50 million dollars in only one year of the 5-year period for that entire game to be counted as a failure. (*See* DeWolf, *et al.*, WP-02-E-BPA-13, at 21-25.) An 88 percent TPP means

that in 12 percent of the games, one or more deferrals occur during the five years. In its Initial Brief on BPA's May Proposal, NWEC/SOS pointed out that BPA's measure of TPP did not distinguish between single and multiple deferrals within a rate period and that, accordingly, "a single deferral of a few million dollars is treated exactly the same as four years of deferrals of hundreds of millions of dollars per year" (Weiss, WP-02-B-NA/SA-01, at 29). BPA acknowledged that the TPP calculation did not, nor was intended to, distinguish between single and multiple deferrals and that, in a *small portion* of the games, the debt incurred from missed Treasury payments was, indeed, quite high. However, given the lower expected system augmentation and *substantiall*y lower market price forecasts in use at that time, BPA deemed the risk acceptable, particularly in light of the 88 percent TPP and relatively low expected impact of deferrals ($56.4 million) on the size of average ending reserves (2002 Final Power Rate Proposal, Administrator's Record of Decision, WP-02-A-02, at 7-14). Since that time, unprecedented high market prices and additional system augmentation have increased both the severity and the likelihood of multiple deferrals, rendering their occurrence an unacceptably high risk, and one which the three-stage CRAC, particularly the SN CRAC, has been designed to mitigate.

It is because of the expected effects of the SN CRAC on the number and magnitude of FY 2006 deferrals that BPA asserts that the Supplemental Proposal satisfies Principle No. 4 with TPPs in the range of 82.7 and 85.9 percent. These effects strengthen BPA's financial position going into the post-2006 rate period and thereby increase the likelihood of then achieving an 80-88 percent TPP.

While the SN CRAC is not likely to head off a first deferral, it would have a strong chance of eliminating subsequent deferrals during the rate period. This would not affect the number of *games* without deferrals since it takes only one deferral over a rate period for a game to constitute a miss, and accordingly would not change TPP. It would,

however, substantially reduce the total number of *deferrals* expected over the rate period by eliminating multiple deferrals. More importantly, by eliminating multiple deferrals, the SN CRAC would substantially reduce the likelihood of a deferral in FY 2006. The only deferrals that would occur in FY 2006 would be first deferrals, which tend to be the least severe, since they reflect the impact of a single year's risks rather than the cumulative multi-year impacts of low water and/or high market prices. Removing impacts of multi-year deferrals in FY 2006 would additionally reduce the likelihood of ending the rate period with low reserves. This, in and of itself, would greatly increase the likelihood of entering the next rate period with sufficient reserves to position BPA for achieving an 80-88 percent TPP for the post-2006 period. Even without the SN CRAC, the ToolKit runs display average ending reserves for FY 2006 that range from $1,045 million to $1,157 million *after* adjusting for the effects of the DDC.

Furthermore, a look at how these ending FY 2006 reserves are distributed illustrates how BPA's LB CRAC and FB CRAC designs have helped satisfy Principle No. 4. In BPA's May Proposal, the modeled likelihood that BPA would end FY 2006 with at least $500 million in reserves was about 75 percent, according to the ToolKit results BPA posted on its web site as part of its May Proposal publishing. The corresponding probabilities from BPA's 12 Supplemental Proposal ToolKit runs range from 75 percent to 84 percent, with half of the results at or above 80 percent. (The 12 runs represent all combinations of two levels of Slice load [0 aMW and 2,000 aMW], two levels of load reduction relative to the Amended Proposal [0 aMW and 1,500 aMW of reduction], and three market levels [$140, $210, and $315 per MWh in FY 2002].) This increase in the likelihood that ending FY 2006 reserves will be at or above $500 million is without consideration of the impact of the SN CRAC. If modeled, the SN CRAC could only increase these probabilities, as well as the expected value of ending reserves.

Q. CRITFC testifies that Treasury Payment is not "the true measure of Bonneville's" risk, but it is a "Creditor Payment Probability" (CPP) that is the true risk. Sheets, et al., Sheets, et al., WP-02-E-CR/YA-06, at. 22-23. Do you agree?

A. No. Treasury Payment is still very important, for both technical reasons and historical precedent. While it is true, as CRITFC points out, that deferral of Treasury payments is a tool BPA possesses to mitigate other financial risks, exercise of that tool carries with it significant costs and risks for BPA and for the region to the extent that the region derives benefits from BPA. TPP has been an important concept used by BPA to explain its financial condition over the last decade, and many of BPA's important stakeholders are, by now, familiar with the concept. TPP remains a very valuable measure in discussions with stakeholders in the Pacific Northwest and in Washington, DC.

Q. NWEC/SOS proposes having two criteria to be met by any proposed rate–TPP and CPP. Weiss, WP-02-E-NA/SA-03, at 11, lines 21-24. Should not BPA develop a "CPP" in this rate case, as NWEC/SOS and CRITFC argue?

A. No. First, BPA's cash management has not historically been considered to be a rate case issue except for the general test of sufficiency for Treasury payments, and BPA does not consider it to be one now. Second, rates cannot fix some of the most problematic aspects of cash flow, since the Net Billing agreements prevent BPA from receiving cash from many of its public customers until the Energy Northwest budget has been paid. This generally means that modifications of BPA rates for public customers would not affect BPA's cash flow in the first few months of a fiscal year. Third, while the extremely high prices in the power market during FY 2001 and high price forecasts for FY 2002 have increased the importance of cash management during this time, virtually all current market forecasts point to a decline in market prices by FY 2003 or 2004 to levels only slightly higher than the levels seen before the surge that occurred in FY 2000. It would not be prudent to construct a long-term cash management strategy on the basis of a

short-term anomaly. Fourth, introducing a major new financial standard such as the proposed CPP would ordinarily be done with significant opportunities for the public to become involved, and this would not be possible if BPA proposed a new standard or accepted another Party's suggestion of one in BPA's rebuttal testimony.

Q. *CRITFC argues that BPA is not adequately dealing with its current situation, and therefore its Supplemental Proposal is inadequate to deal with its FY 2002-2006 risks. As an example, they argue that "It appears that Bonneville will not have sufficient cash to fully pay its obligation to the Treasury and will use its 4(h)(10)(C) credits instead." Sheets, et al,.WP-02-E-CR/YA-06, at 19. Is this an accurate characterization of BPA's current financial outlook?*

A. No. *See* Burns, *et al.*, WP-02-E-BPA-75 for rebuttal of CRITFC's general argument. Additionally, although it appears that BPA will be taking a large 4(h)(10)(C) credit for FY 2001 that may cover most or all of its payment to Treasury, CRITFC's assertion that BPA "will not have sufficient cash to fully pay its obligation to the Treasury" is seriously misleading. It suggests that somehow, because of financial difficulties, BPA will fail to meet its responsibilities to Treasury. This is not true. A more accurate characterization of the current situation would be that BPA will be receiving a large 4(h)(10)(C) credit, as *required* by law, in FY 2001 because, before the end of the fiscal year, it will have *already* fulfilled its payment obligations to Treasury through the expenditures made on behalf of non-power uses of the hydrosystem.

Q. *Please explain.*

A. Under the Northwest Power Act, the Administrator makes expenditures from the Bonneville Fund to protect, mitigate, and enhance fish and wildlife affected by Federal dams. Cash in the Bonneville Fund comes from payments BPA's customers make for the power and transmission services they receive under contract, not from appropriations. However, not all of the fish and wildlife costs that are paid for from the fund are incurred

by power purposes. Office of Management and Budget, Treasury, and BPA agreed that since non-power purposes represented the 27 percent of the benefits received from fish mitigation efforts, power customers should not be responsible for 27 percent of expenditures made by BPA. Fish mitigation efforts include BPA's annual fish and wildlife program expense and ESA-related expenditures that are consistent with the Northwest Power Planning Council's fish and wild life program; BPA capital expenditures (on tributary passage, habitat construction, and supplemental construction); and net replacement power purchase expenses (value of lost firm capability due to fish mitigation measures) assessed at prevailing market values for power.

So that ratepayers pay no more than the power share of fish and wildlife costs, Congress directed BPA to allocate its funding of non-power purposes via 4(h)(10)(C) credits and provided BPA with the flexibility to treat expenditures in excess of its allocated share as being payments for its costs. These credits, in effect, allow the region's ratepayers to be "reimbursed" for temporarily "subsidizing" non-power purposes. The credits are currently implemented by reducing cash payments to Treasury. They do not in any way reduce BPA's payment obligation; rather, they are treated as revenue that is used to *satisfy* the payment obligation. (For further discussion, *see* 1996 Final Rate Proposal, Revenue Requirement Study Documentation, WP-96-FS-BPA-02A, Volume 1, at 577-580.) Thus, even though extremely high power purchase costs may result in credits nearly equal to the size of the entire Treasury payment for FY 2001, they must be viewed as satisfying BPA's obligation consistent with provisions of the Northwest Power Act.

Q. Does that conclude your testimony?

A. Yes.

Attachment A

Proposed Revisions to General Rate Schedule Provisions

SUPPLEMENTAL 2002 GENERAL RATE SCHEDULE PROVISIONS

A. Introduction

The following section (Part B below) contains Bonneville Power Administration's (BPA) proposed supplemental revisions to BPA's proposed 2002 General Rate Schedule Provisions (GRSPs) for power rates.

The proposed GRSPs were prepared in accordance with BPA's statutory authority to develop rates. These schedules and 2002 GRSPs shall be applicable to all BPA contracts, including contracts executed both prior to, and subsequent to, enactment of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act). All sales under these rate schedules are subject to the following acts as amended: the Bonneville Project Act, the Regional Preference Act (P.L. 88-552), the Transmission System Act (P.L. 93-454), the Northwest Power Act (P.L. 96-501), and the Energy Policy Act of 1992 (P.L. 102-486).

BPA's 2002 proposed revisions to the GRSPs will supersede BPA's 1996 rate schedules, except for the FPS-96 rate schedule. The FPS-96 rate schedule continues in effect as modified in Docket No. FPS-96R. BPA proposes that its revised GRSPs become effective upon interim approval or upon final confirmation and approval by FERC. BPA currently anticipates that it will request FERC approval of its revised GRSPs effective October 1, 2001.

B. Summary of 2002 Wholesale Power Rate Schedules, 2002 GRSPs, and New 1996 GRSPs

BPA'S SUPPLEMENTAL 2002
GENERAL RATE SCHEDULE PROVISIONS
FOR POWER RATES
INDEX OF REVISIONS TO THE
GENERAL RATE SCHEDULE PROVISIONS

SECTION II: ADJUSTMENTS, CHARGES, AND SPECIAL RATE PROVISIONS

F. Cost Recovery Adjustment Clause
   1. Load-Based Cost Recovery Adjustment Clause
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H. Dividend Distribution Clause

J. Five-Year Flat Block Price Forecast for Monetary Benefit Component of Investor-Owned Utility Settlements

S. Slice True-Up Adjustment

T. Slice Adjustment for Investor-Owned Utility Financial Settlement Increment

F. Cost Recovery Adjustment Clause

There are three sets of conditions under which rate increases under Cost Recovery Adjustment Clause (CRAC) may trigger. The first is the Load-Based CRAC (LB CRAC), which triggers based on BPA's costs of augmentation power. The second is the Financial-Based CRAC (FB CRAC), which triggers based on the generation function's forecasted level of accumulated net revenues. The third is the Safety-Net CRAC (SN CRAC), which triggers when, after implementation of the LB and FB CRACs, BPA has or reasonably expects to miss a payment to the Treasury or another creditor.

1. Load-Based Cost Recovery Adjustment Clause

a. Application of the Load-Based Cost Recovery Adjustment Clause

The LB CRAC is a percentage rate adjustment based on BPA's cost of acquiring power to meet BPA's contractual obligations to serve loads in excess of the expected firm capability of the Federal Columbia River Power System (FCRPS).

The LB CRAC will be calculated and applied to the following rates for sales of energy, capacity, and load variance: PF [Preference (excluding Slice), Exchange Program, and Exchange Subscription], Industrial Firm Power (IP-02), including under the Industrial Firm Power Targeted Adjustment Charge (IPTAC) and Cost-Based Index Rate, Residential Load (RL-02), New Resource Firm Power (NR-02), and Subscription purchases under Firm Power Products and Services (FPS), excluding revenues generated by the FB CRAC, SN CRAC, and distributions under DDC.

The LB CRAC does apply to the 1,000 aMW power sale portion of the Residential Exchange Program (REP) Settlement, including where power sales are converted to cash payments calculated pursuant to Section 5(b) of the Residential Exchange Settlement Agreement. The LB CRAC will also apply to the Priority Firm Slice Rate, excluding revenues from the contractual true-up pursuant to the Slice Agreement, and payments pursuant to section T of these GRSPs.

The LB CRAC does not apply to power sales under Pre-Subscription contracts to the extent prohibited by such contracts, the 900 aMW of monetary benefits provided under the financial portion of the Residential Exchange Program (REP) Settlement, or to BPA's current contractual obligations for Seasonal Irrigation Mitigation sales, including for any eligible customer that converts from Slice to another BPA product. The LB CRAC does apply to the 1,000 aMW of power deliveries made under the power sale portion of the REP Settlement, including where such power sales are converted to cash payments calculated pursuant to Section 5(b) of the REP Settlement Agreement

b. **Definitions**

(1) (AAMTA) "Augmentation Amount Actual" means the amount of actual augmentation required as determined in section f(1)~~g~~ of these GRSPs.

(2) (AAMTF) "Augmentation Amount Forecast" means the forecasted augmentation as determined in section d of these GRSPs.

(3) (ACTUALLBCREVREQ) "Actual LB CRAC Revenue Required" means an amount equal to the actual costs incurred by BPA to acquire AAMTA during any six-month period, and is equal to the sum of ACTUALLBCREVREQ(NS) [for Non-Slice products] and ACTUALLBCREVREQ(S) [for the Slice product].

(4) (ACTUALLBCREVREQ[NS]) "Actual LB CRAC Revenue Required (Non-Slice)" means the portion of the actual costs incurred by BPA to acquire AAMTA during any six-month period purchases apportioned to Non-Slice Rates.

(5) (ACTUALLBCREVREQ[S]) "Actual LB CRAC Revenue Required (Slice)" means the portion of the actual costs incurred by BPA to acquire AAMTA during any six-month period that is apportioned to Slice.

(6) ADJUST[NS]) "Adjustment to a Purchaser's Non-Slice Monthly Bill" means the adjustment to a customer's monthly power bill for the purchase of energy, capacity and load variance products under Non-Slice Rates in an amount equal to one-sixth (1/6) of the customer's share of the Revenue Difference (REVDIFF[NS]) for the preceding six-month period.

(7) (ADJUST[S]) “Adjustment to a Purchaser’s Slice Monthly Bill” means the adjustment to a customer’s monthly power bill for purchases under Slice in an amount equal to the customer’s share of REVDIFF(S) for the preceding six-month period.

(8) (APP) “Augmentation Pre–Purchase” means the quantity of power under a contract or other binding obligation entered into by BPA at least 120 days prior to the first day of the next six-monthsixty day period for the delivery of AAMTF for a given month.

~~(9) (APPA[NS]) “Augmentation Pre-Purchase Actual - Non-Slice” means the actual Augmentation Pre-Purchase made by BPA at any time prior to the first day of the month in which the power so purchased is to be delivered.~~

~~(10) (APPA[S]) “Augmentation Pre-Purchase Actual - Slice” means any Augmentation Pre-Purchase made by BPA at any time prior to 120 days prior to the first day of the month in which the power so purchased is to be delivered.~~

(9~~1~~) (BUYDOWN) “Cost of Load Buydown” means the costs that BPA incurs to reduce or eliminate its contractual obligation to deliver firm power to regional customers and thereby lower the AAMTF or AAMTA for a month.

(10~~2~~) (C&R(NS)) “Conservation and Renewables Discount– Non-Slice” means the total dollars actually credited to all Non-Slice purchasers under the Conservation & Renewable Discount .

(11~~3~~) (C&R(S)) “Conservation and Renewables Discount– Slice” means the total dollars actually credited to all Slice purchasers under the Conservation & Renewables Discount.

(12) (CUSTREV[NS]) “Customer Revenue with LB CRAC – Non-Slice” means the actual revenues received by BPA from each customer for a given six-month period for the purchase of energy, capacity and load variance service at Non-Slice Rate subject to the LB CRAC, reduced by any C&R(NS) and LDD(NS).

(13~~5~~) (CUSTREV[S]) “Customer Revenue with LB CRAC - Slice” means the actual revenues received by BPA from each customer for a given six-month period for purchases at the Slice rate subject to the LB CRAC, reduced by any C&R(S) and LDD(S).

~~(16)~~(14) (DIURNALACA) “Actual Diurnal Augmentation Cost” means the diurnal cost, in dollars, actually incurred by BPA to acquire AAMTA. Diurnal costs are calculated using monthly flat AAMTA and the diurnal cost of acquiring that AAMTA.

(15) (DIURNALACF) “Diurnal Augmentation Cost Forecast” means the diurnal cost, in dollars, that BPA forecasts it will incur to acquire AAMTF. Diurnal costs are calculated using monthly flat AAMTF amounts and the diurnal cost of acquiring those AAMTF amounts.

(16~~8~~) (LB CRAC%) “LB CRAC Percentage” means the percentage produced by dividing Net Augmentation Costs Forecasted (NACF) by Total Revenues without LB CRAC (TTREVw/oLBC).

(17~~9~~) (LBCREV[NS]) “LB CRAC Revenues (Non-Slice) Received by BPA” means the amount of revenues actually received by BPA during any six-month period from the sale of energy, capacity and load variance services at Non-Slice Rates subject to the LB CRAC, as reduced by the C&R(NS) and LDD(NS) .

(18~~20~~) (LBCREV[S]) “LB CRAC Revenues [Slice] Received by BPA” means the amount of revenues actually received by BPA during any six-month period from sales at the Slice rate (WP-A-02, Section II D. 2), reduced by the C&R(S) and LDD(S) .

(19~~1~~) (LDD(NS)) “Low Density Discount Non-Slice” means the total dollars actually credited to all purchasers under Non-Slice Rates subject to the LB CRAC under the Low Density Discount.

(20~~2~~) (LDD(S)) “Low Density Discount Slice” means the total dollars actually credited to all purchasers under the Slice rate under the Low Density Discount.

(21~~3~~) (LOAD[NS]) “Non-Slice Load Subject to LB CRAC” means the loads that are served by BPA at Non-Slice Rate that are subject to the LB CRAC.

(22) (LOAD[S]) “Slice Load Subject to LB CRAC” means loads that are served by BPA at the Slice rate. LOAD[S] is initially 2,000 aMW, but will be adjusted to reflect contracted Slice loads prior to October 1, 2001.

(23~~5~~) (MARRA) “Monthly Augmentation Resale Revenues Actual” means the actual monthly resale revenues determined by

multiplying the (a) sum of (i) Sales of Existing Augmentation Quantity (SALESMAYAUG) multiplied by $28.10 and (ii) Sales of New Augmentation Quantity (SALESNEWAUGA) multiplied by $19.26; by (b) the number of hours in the month.

(24~~6~~) (MARRF) "Monthly Augmentation Resale Revenues Forecasted" means the forecasted monthly resale revenues determined by multiplying the (a) sum of (i) Sales of Existing Augmentation Quantity (SALESMAYAUG) multiplied by $28.10 and (ii) Sales of New Augmentation Quantity (SALESNEWAUGF) multiplied by $19.26; by (b) the number of hours in the month.

(25~~7~~) (MSC) "Monthly System Capability" means the monthly value obtained by shaping the firm system capability to BPA's firm monthly loads, where firm system capability equals 7070 aMW of FCRPS capability, less the amount of such capability sold to Slice purchasers. A separate shape will be produced for each separate year in the rate period. These monthly amounts of MSC are established once in the Supplemental Rate Case ROD.~~Monthly System Capability" means the monthly value obtained by shaping the firm, 7070 aMW of FCRPS capability, less the amount of such capability sold to Slice purchasers, to BPA's firm monthly loads.~~.

(26~~8~~) (NACA) "Net Augmentation Cost Actual" means the additional augmentation costs that are actually required to be recovered through application of the LB CRAC. NACA is determined separately for each month in any given six-month period.

~~(NACA[NS]) "Net Augmentation Cost Actual - Non-Slice Rule" means the Net Augmentation Costs actually incurred by BPA calculated using APPA(NS) and PRICEA(NS) and TARRA~~

~~(29) (NACA[S]) "Net Augmentation Cost Slice Actual - Slice" means the Net Augmentation Costs actually incurred by BPA calculated using APPA(S) and PRICEA(S) and TARRA.~~

(2~~7~~)~~(30)~~ (NACF) "Net Augmentation Cost Forecast" means the forecast of additional augmentation costs that are required to be recovered through application of the LB CRAC. NACF is forecasted separately for each month in any given six-month period.

~~(31)~~(28) (NACDIFF) "Net Augmentation Cost Difference" means the difference between NAC(120) and NAC(0).

(291) (NSL(A)) "Actual Non-Slice Load" means the actual amount of load served by BPA under Non-Slice Rates during a six-month period.

(302) (NSL(F)) "Forecasted Non-Slice Load" means the amount of load served by BPA during a six-month period under Non-Slice Rates.

(313) "Non-Slice Rates" means all BPA firm power rates, other than the PF Slice Rate~~, that are subject to the LB CRAC,~~ and includes PF Preference, PF Exchange Program, PF Exchange Subscription, Industrial Firm Power, Industrial Firm Power Targeted Adjustment Charge and Industrial Firm Power Cost Based Index, Residential Load, New Resource Firm Power and the Firm Power Products and Services Rates.

(324) (OC) "Option Costs" means the costs actually incurred or revenues received by BPA by entering into physical or financial option contracts, or other financial contracts, or to reduce the cost of acquiring the cost of AAMTA or AAMTF.

(335) (PRICE) "Price For Forecasted Augmentation Amounts Not Pre-Purchased" means the forward price per megawatthour (MWh) used by BPA to determine the cost of purchasing power equal to the amount by which AAMTF exceeds APP. The PRICE will be established by BPA through the use of documented quotes for specific quantities from brokers or marketers or publicly available forward price indices. In each case, it is for electricity delivered at the Mid-Columbia market hub.

~~(36) (PRICEA[NS]) "Price For Augmentation Amounts Actually Not Prepurchased Non-Slice" means the forward price per megawatthour (MWh) obtained in the five days prior to the first day of the month of delivery and used by BPA to determine the costs of purchasing power equal to the amount by which AAMTA exceeds APPA[NS], as established by BPA through the use of documented quotes for specific quantities from brokers or marketers or publicly available forward price indices. In each case, it is for electricity delivered at the Mid-Columbia market hub.~~

~~(37) (PRICEA[S]) "Price For Augmentation Amounts Actually Not Prepurchased - Slice" means the forward price per megawatthour (MWh) obtained 120 or more days prior to the first day of the month of delivery and used by BPA to determine the costs of purchasing power equal to the amount by which AAMTA exceeds APPA[S], as established by BPA through the use of documented~~

~~quotes for specific quantities from brokers or marketers or publicly available forward price indices. In each case, it is for electricity delivered at the Mid-Columbia market hub.~~

(34~~8~~) (RATE[NS]) "Non-Slice Rates Without LB CRAC" means the Non-Slice rates established by BPA in May 2000 in the Administrator's Record of Decision in BPA Docket WP-02.

(35~~9~~) (RATE[S]) "Slice Rate without LB CRAC" means the Slice rate established by BPA in May 2000 in the Administrator's Record of Decision in BPA Docket WP-02.

(~~40~~36) (REVDIFF[NS]) "Revenue Difference Non-Slice" means the amount by which actual LBCREV(NS) exceeds or is less than ACTUALLBCREVREQ(NS) during any six-month period.

(3741) (REVDIFF[S]) "Revenue Difference Slice" means the amount by which actual LBCREV(S) exceeds or is less than ACTUALLBCREVREQ(S) during any six-month period.

(38~~42~~) (REVRATE[NS]) "Adjusted Non-Slice Rates" means the Non-Slice Rates that will apply to sales of energy, capacity and load variance products during the immediately upcoming six-month period.

(39~~3~~) (REVRATE[S]) "Adjusted Slice Rate" means the Slice rate that will apply to sales of the Slice product during the immediately upcoming six-month period.

(40) (REVw/LBC[NS]) "Actual Non-Slice Revenues" means the monthly revenues actually received by BPA from sales of energy, capacity and load variance products during any six-month period, reduced by the C&R(NS) and LDD(NS).

(41~~5~~) (REVw/LBC[S]) "Actual Slice Revenues" means the monthly revenues actually received by BPA from sales of the Slice product during any six-month period reduced by C&R(S) and LDD(S).

(42~~6~~) (REVw/oLBC[NS]) "Baseline Non-Slice Revenues" means the monthly revenues received by BPA from sales of energy, capacity and load variance products subject to LB CRAC using RATE(NS) during any given six-month period reduced by the C&R(NS) and LDD(NS).

(437) (REVw/oLBC[S]) “Baseline Slice Revenues” means the monthly revenues received by BPA from sales of the Slice product during any given six-month period calculated using RATE(S), reduced by the C&R(S) and LDD(S).

(448) ~~(SALESMAYAUGA)~~ “(SALESMAYAUGA) “Actual Sales of Existing Augmentation Quantity” means the resale of augmentation of 1,282 aMW plus [(actual DSI load/1486) * 450].~~“Sales of Augmentation Quantity” means the monthly amount equal to 1,732 aMW, which is the amount, included in the Administrator’s Record of Decision in BPA Docket WP-02~~.

(45) ~~(SALESMAYAUGF) “~~Forecasted Sales of Existing Augmentation Quantity” means the resale of augmentation of 1,282 aMW plus [(forecasted DSI load/1486) * 450].

(469) (SALESNEWAUGA) “Sales of New Augmentation Quantity Actual” means the actual monthly amount (in aMW) by which AAMTA is greater than the amount in SALEMAYAUGA.

(4750) (SALESNEWAUGF) “Sales of New Augmentation Quantity Forecasted” means the forecasted monthly amount (in aMW) by which AAMTF is greater than the amount in SALEMAYAUGF.

(4851) (TAUGCA) “Total Augmentation Cost Actual” means the sum of the monthly DIURNALACA, BUYDOWN and OC amounts for a given six-month period

(4952) (TAUGCF) “Total Augmentation Cost Forecast” means the sum of the monthly DIURNALACF, BUYDOWN and OC amounts for a given six-month period.

(503) (TARRA) “Total Augmentation Resale Revenue Actual” means the sum of the separate monthly MARRA amounts for a given six-month period.

(51) (TARRF) “Total Augmentation Resale Revenue Forecasted” means the sum of the separate monthly MARRF amounts for a given six-month period

(525) (TCAPPA~~(NS)~~) “Total Cost of Augmentation Pre-Purchases Actual Non-Slice” means the actual total cost to acquire APPA(NS) .

~~(56) (TCAPPA(S)) "Total Cost of Augmentation Pre-Purchases Actual Slice" means the actual total cost to acquire APPA(S).~~

(5~~3~~7) (TCAPPF) "Total Cost of Augmentation Pre-Purchases Forecasted" means the forecasted total cost of the APP made for a month.

(5~~4~~8) (TREVw/LBC[NS]) "Total Revenues for Non-Slice With LB CRAC" means the sum of all REVw/LBC(NS) for any given six-month period.

(~~57~~955) (TREVw/LBC[S]) "Total Revenues for Slice with LB CRAC" means the sum of all REVw/LBC(S) for any given six-month period.

(56~~60~~) (TTREVw/LBC) "Total Revenues with LB CRAC" means the sum of TREVw/LBC(S) and TREVw/LBC(NS).

(57~~61~~) (TREVw/oLBC[NS]) "Total Non-Slice Revenues Without LB CRAC" means the sum of all REVw/oLBC(NS) for any given six-month period.

(58~~62~~) (TREVw/oLBC[S]) "Total Slice Revenues without LB CRAC" means the sum of all REVw/oLBC(S) for any given six-month period.

(59~~63~~) (TTREVw/oLBC) "Total Revenues without LB CRAC" means the sum of TREVw/oLBC(S) and TREVw/oLBC(NS).

(60) (TLA) "Transmission Loss Adjustment" means the Network loss factor adjustment applied under applicable BPA Transmission Business Line tariffs.

c. **Procedure**

BPA published five forecasted LB CRAC percentages (one for each fiscal year) in the Final Rate Proposal Record of Decision (ROD). Step One below addresses the calculations for determining the substitute LB CRAC percentages that will actually apply to each upcoming six-month period in place of the percentages published in the ROD. Step Two below addresses the determination of any rebate or surcharge due to actual LB CRAC exceeding or falling short of the actual costs incurred by BPA to acquire power after the end of the preceding six-month period. This section also describes the procedure by which BPA will provide public process on the application of the LB CRAC.

(1) Step One is calculation of the LB CRAC percentage and resulting adjustment to the rates that will be applied in each upcoming six-month period. This LB CRAC percentage will be an update of the LB CRAC percentage contained in the ROD. On or about 90 days prior to the beginning of each six-month period (or in the case of the calculation of the LB CRAC to be applied for the period April 1 through September 30, 2002, on or about 45 days prior to the beginning of that second six-month period), BPA will establish the LB CRAC percentage and resulting adjustment to the rates that will apply to the sale of products under rates subject to the LB CRAC during upcoming six-month period. Using the process described in c(3) below, BPA will determine what data must be revised from that used to develop the LB CRAC for the next six-month period .

(2) Step Two is the calculation of the amount by which actual LB CRAC revenues exceeded or fell short of the actual costs incurred by BPA to acquire power for the most recently concluded six-month period. As is described below, this calculation does not require a new calculation of the LB CRAC percentage or rates. The amount by which actual LB CRAC revenue exceeded or fell short of actual power costs will be established on or about 90 days after the end of the most recent six-month period. Any such excess or shortfall will be treated separately from any LB CRAC adjustment for the upcoming six-month period. A part of this determination involves revising data from that used to develop the LB CRAC in c(1) immediately above.

(3) Fifteen days prior to the date that BPA must establish the LB CRAC Percentage pursuant to paragraph c(1) above, and any charge or rebate for the amount of any excess or short-fall from the preceding six-month period, BPA will conduct a publicly noticed workshop. For the calculations to be performed for the first six-month period, BPA shall hold two workshops approximately 14 days apart, with the first workshop on or about June 6, 2001. Prior to the~~is~~ workshops BPA will make available to all participants BPA's proposed calculation used to develop the LB CRAC percentages consistent with the methodology Section d, e, f, and g. The purpose of the workshop before a six-month period will be to provide customers with information used by BPA to develop the LB CRAC Percentage and adjusted rates for the next six-month period. The information used to perform these calculations will be provided to customers at a quarterly level of aggregation. The purpose of the workshop after a six-month

period will be to determine and any additional charge or rebate due individual customers due to any excess or shortfall of actual LB CRAC revenue to cover NACA from the preceding six-month period. The information used to perform these calculations will be at a quarterly level of aggregation (including total and individual customer revenues used for such calculations). These workshops will provide customers with an opportunity to ask questions about BPA's calculations, and to provide BPA with information relevant to the calculation of the LB CRAC Percentage, adjusted rates, and any proposed charge or rebate.

d. **Revenue and cost calculations performed before each six-month period**

Before the six-month period, these calculations are performed with forecasted amounts to determine the LB CRAC Percentage and revised rates to be applied to purchaser bills during that period.

(1) Calculating AAMTF

This is a two-step process.

(i) Step One – Forecasted Non-Slice Loads (NSL(F))

In this step, BPA will determine what if any changes are required in the Forecasted Non-Slice loads contained in the Supplemental ROD.

(ii) Step Two – Forecasted Augmentation Amount (AAMTF)

For each month separately, AAMTF = (NSL(F) – MSC) * (1 + ~~Transmission Loss Adjustment~~TLA)

(2) Calculating the DIURNALACF

In this calculation, BPA establishes the costs it expects to incur to acquire AAMTF for each diurnal period for each month in the six-month period.

The following calculations will be separately performed for the HLH in a month and the LLH in each month in the next six-month period.

i. If APP is greater than AAMTF,
DIURNALACF = (AAMTF/APP) * [TCAPPF]

ii. If APP is equal to AAMTF,

DIURNALACF = TCAPPF

iii If APP is less than AAMTF,

DIURNALACF = [TCAPPF] + [(AAMTF-APP) * PRICE * Diurnal Hours]

(3) Calculating Total Augmentation Cost Forecast for a six-month period

BUYDOWN and OC obligations incurred as of the date of the forecast, and DIURNALCF monthly values for a six-month period will be summed to determine the Total Augmentation Cost Forecast (TAUGCF) for the six-month period.

TAUGCF = Sum of the six monthly (DIURNALACF + BUYDOWN + OC)

(4) Calculating Monthly and Total Augmentation Resale Revenues

This calculation establishes the resale revenue amount to be subtracted from TAUGCF for the six-month period.

MARRF = [(SALESMAYAUGF * $28.10) + (SALESNEWAUG~~(~~F~~)~~* $19.26)] * Hours in the month

TARRF = Sum of MARRF for each month in a six-month period

(5) Calculating Net Augmentation Cost Forecast for a six-month period

Once the TARRF is established, the NACF will be determined. This is the amount of forecasted costs that must be recovered in an LB CRAC mechanism.

NACF = TAUGCF - TARRF

(6) Calculating Monthly Revenues

This calculation determines the monthly revenues BPA receives from the sale of energy, capacity and load variance products,

including Slice, at rates that are subject to LB CRAC before the application of the LB CRAC.

For the Slice rate,

REVw/oLBC(S) = [RATE(S) * LOAD(S)] – LDD(S) – C&R (S)

Because the Slice rate is stated as $/% per month, REVw/oLBCS, LOAD(S) is calculated using the percentage of Slice contracted

for, with 28.29% = 2000aMW of Slice. For Slice calculations, LDD(S) and C&R(S) are calculated as dollars.

For Non-Slice Rates,

REVw/oLBC(NS) = [RATE(NS) * LOAD(NS) * Hours in month] – LDD(NS) – C&R(NS)

Because Non-Slice Rates are stated as $/MWh and $/kW-month, LOAD(NS) is expressed in MWh and kW for the month. LDD(NS) and C&R(NS) are values of the discounts in dollar amounts.

(7) Calculating Total Revenues without the LB CRAC for a six-month period

TREVw/oLBC(S) = REVw/oLBC(S) for each month in six-month period.

TREVw/oLBC(NS) = REVw/oLBC(NS) for each month in six-month period.

TTREVw/oLBC = TREVw/oLBC(S)+TREVw/oLBC(NS)

e. **Calculation of the LB CRAC percentage and revised rates for Slice and Non-Slice products**

Calculations under this section e only occur once in advance of each six-month period to make the adjustment that will apply to the upcoming six-month period. When the six-month period is over, the calculations in section f are performed.

(1) Calculating the LB CRAC Percentage

LB CRAC% = NACF/TTREVw/oLBC

(2) Calculating the adjustment to RATE(NS) and RATE(S)

(i) Slice Rate

REVRATE(S) = RATE(S) * [((TREVw/oLBC(S) + LDD(S)) * LB CRAC%) + (TREVw/oLBC(S) + C&R(S) + LDD(S)]/ [TREVw/oLBC(S) + C&R(S) + LDD(S)]}

(ii) Non-Slice Rates

REVRATE(NS) = RATE(NS) *{ [((TREVw/oLBC(NS) + LDD(NS))* LB CRAC%) + (TREVw/oLBC(NS) + C&R (NS) + LDD(NS))]/[TREVw/oLBC(NS) + C&R (NS) + LDD(NS)]}

(3) Application of Revised Rates

The REVRATE(S) and REVRATE(NS) will replace the RATE(S) and RATE(NS), respectively, on purchaser's bills for products sold in the next six-month period that are subject to the LB CRAC.

f. **Calculations performed after the close of each six-month period**

After the six-month period, these calculations are performed with actual amounts to determine the amount of any adjustment to individual customer bills as a result of an over or under collection of LB CRAC revenues.

(1) Calculating AAMTA

This is a two-step process.

(i) Step One – Actual non-Slice Loads (~~ANSL~~NSL(A))

In this step, BPA will determine the actual non-Slice loads.

(ii) Step Two – Actual Augmentation Amount (AAMTA)

For each month separately, AAMTA = (NSL(A) – MSC) * (1+ TLA).

(2) Calculating DIURNALACA

In this calculation, BPA establishes the costs it actually did incur to acquire AAMTA for each diurnal period for each month in the six-month period.

The following calculations will be separately performed for the HLH in a month and the LLH in each month in the next six-month period.

(i) If APP is greater than AAMTA,

DIURNALACA = (AAMTA/APP) * [TCAPP]

(ii) If APP is equal to AAMTA,

DIURNALACA = TCAPP

(iii) If APP is less than AAMTA,

DIURNALACA = [TCAPP] + [(AAMTA-APP) * PRICE * Diurnal Hours]

(3) Calculating Total Augmentation Cost Forecast for a six-month period

Once DIURNALACA, BUYDOWN and OC are determined, these monthly values for a six-month period will be summed to determine the Total Augmentation Cost Actual (TAUGCA) for the six-month period.

TAUGCA = Sum of the six monthly (DIURNALACA + BUYDOWN + OC)

(4) Calculating Monthly and Total Augmentation Resale Revenues

This calculation establishes the resale revenue amount to be subtracted from TAUGCA for the six-month period.

MARRA = [(SALESMAYAUGA * $28.10) + (SALESNEWAUGA * $19.26)] * Hours in the month

TARRA = Sum of MARRA for each month in a six-month period

(5) Calculating Net Augmentation Cost Actual for a six-month period

Once the TARRA is established, the NACA will be determined. This is the actual costs that must be recovered in an LB CRAC mechanism.

NACA = TAUGCA - TARRA

(6) Calculating Monthly Revenues

(i) This calculation determines the monthly revenues BPA *would have* received from the sale of energy, capacity and load variance products, including Slice, at rates that are subject to LB CRAC before the application of the LB CRAC, but using actual loads.

For the Slice rate,

REVw/oLBC(S) = [RATE(S) * LOAD(S)] – LDD(S) – C&R(S)

Because the Slice rate is stated as $/% per month, REVw/oLBCS, LOAD(S) is calculated using the percentage of Slice contracted for, with 28.29% = 2,000 aMW of Slice.

For Non-Slice rates,
REVw/oLBC(NS) = [RATE(NS) * LOAD(NS) * Hours in month] – LDD(NS) – C&R(NS)

Because Non-Slice rates are stated as mills/kWh and $/kW-month, LOAD(NS) is expressed in kWh and kW for the month.

(ii) Calculating Actual Monthly Revenues received

This calculation determines the monthly revenues BPA *actually did* receive from the sale of energy, capacity and load variance products, including Slice, at rates that are subject to LB CRAC *after* the application of the LB CRAC, but using actual loads.

For the Slice rate,

REVw/LBC(S) = [REVRATE(S) * LOAD(S)] – LDD(S) – C&R(S)

Because the Slice rate is stated as $/% per month, REVw/oLBCS, LOAD(S) is calculated using the percentage of Slice contracted for, with 28.29% = 2,000 aMW of Slice.

For Non-Slice rates,
REVw/LBC(NS) = [REVRATE(NS) * LOAD(NS) * Hours in month] – LDD(NS) – C&R(NS)

Because Non-Slice rates are stated as $/MWh and $/kW-month, LOAD(NS) is expressed in MWh and kW for the month.

(7) Calculating Total Revenues for a six-month period

(i) Without the LB CRAC applied

TREVw/oLBC(S) = REVw/oLBC(S) for each month in six-month period.

TREVw/oLBC(NS) = REVw/oLBC(NS) for each month in six-month period.

TTREVw/oLBC = TREVw/oLBC(S)+TREVw/oLBC(NS)

(ii) With the LB CRAC applied

TREVw/LBC(S) = REVw/LBC(S) for each month in six-month period.
TREVw/LBC(NS) = REVw/LBC(NS) for each month in six-month period.

TTREVw/LBC = TREVw/LBC(S)+TREVw/LBC(NS)

~~After the six-month period, these calculations are performed to determine the amount of any adjustment to individual customer bills as a result of LB CRAC revenues exceeding or falling short of the costs incurred to acquire AAMTA.~~

~~(1) Calculating AAMTA~~

~~This is a two-step process.~~

~~(i) Step One – Actual Non-Slice Loads (NSL(A))~~

~~In this step, BPA will determine the Actual Non-Slice loads.~~

~~(ii) Step Two – Actual Augmentation Amount (AAMTA)~~

~~For each month separately, AAMTA = (NSL(A) – MSC) * (1 + Transmission Loss Adjustment).~~

~~(2) Calculating DIURNALACA(NS)~~

~~In this calculation, BPA establishes the costs it actually did incur to acquire AAMTA for each diurnal period for each month in the six-month period.~~

~~The following calculations will be separately performed for the HLH in a month and the LLH in each month in the next six-month period.~~

~~(i) If APPA(NS) is greater than AAMTA,~~

~~DIURNALACA(NS) = (AAMTA/APPA(NS)) * [TCAPPA(NS)]~~

~~(ii) If APPA(NS) is equal to AAMTA,~~

~~DIURNALACA(NS) = TCAPPA(NS)~~

~~(iii) If APPA(NS) is less than AAMTA,~~

~~DIURNALACA(NS) = [TCAPPA(NS)] + [(AAMTA-APPA(NS)) * PRICEA(NS) * Diurnal Hours]~~

~~(3) Calculating Total Augmentation Cost Actual Non-Slice for a six-month period~~

~~Any additional BUYDOWN and OC incurred after DIURNALACF is determined, and DIURNALACA(NS) for a six-month period will be summed to determine the Total Augmentation Cost Actual Non-Slice (TAUGCA(NS)) for the six-month period.~~

~~TAUGCA(NS) = Sum of the six monthly (DIURNALACA(NS) + BUYDOWN + OC)~~

~~(4) Calculating Monthly and Total Augmentation Resale Revenues~~

~~This calculation establishes the resale revenue amount to be subtracted from TAUGCA(NS) for the six-month period.~~

~~MARRA = [(SALESMAYAUG * $28.10) + (SALESNEWAUGA * $19.26)] * Hours in the month~~

~~TARRA = Sum of MARRA for each month in a six-month period~~

~~(5) Calculating Net Augmentation Cost Actual Non-Slice for a six-month period~~

~~Once the TARRA is established, the NACA will be determined. This is the actual costs that must be recovered in an LB CRAC mechanism.~~

~~NACA(NS) = TAUGCA(NS) TARRA~~

~~(6) Calculating DIURNALACA(S)~~

~~In this calculation, BPA establishes the costs it actually did incur to acquire AAMTA for each diurnal period for each month in the six-month period.~~

~~The following calculations will be separately performed for the HLH in a month and the LLH in each month in the next six-month period.~~

~~(i) If APPA(S) is greater than AAMTA,~~

~~DIURNALACA(S) = (AAMTA/APPA(S)) * [TCAPPA(S)]~~

~~(ii) If APPA(S) is equal to AAMTA,~~

~~DIURNALACA(S) = TCAPPA(S)~~

~~(iii) If APPA(S) is less than AAMTA,~~

~~DIURNALACA(S) = [TCAPPA(S)] + [(AAMTA-APPA(S)) * PRICEA(S) * Diurnal Hours]~~

~~(7) Calculating Total Augmentation Cost Actual Slice for a six-month period~~

~~Any additional BUYDOWN and OC incurred after DIURNALACF was determined, and DIURNALACA(S) for a six-month period will be summed to determine the Total Augmentation Cost Actual Slice (TAUGCA(S)) for the six-month period.~~

~~TAUGCA(S) = Sum of the six monthly (DIURNALACA(S) + BUYDOWN + OC)~~

~~(8) Calculating Monthly and Total Augmentation Resale Revenues~~

~~This calculation establishes the resale revenue amount to be subtracted from TAUGCA(S) for the six-month period.~~

~~MARRA = [(SALESMAYAUG * $28.10) + (SALESNEWAUGA * $19.26)] * Hours in the month~~

~~TARRA = Sum of MARRA for each month in a six-month period~~

~~(9) Calculating Net Augmentation Cost Actual Slice for a six-month period~~

~~Once the TARRA is established, the NACA(S) will be determined. This is the actual costs that must be recovered in an LB CRAC mechanism.~~

~~NACA(S) = TAUGCA(S) - TARRA~~

~~(10) Calculating Monthly Revenues~~

~~(i) This calculation determines the monthly revenues BPA *would have* received from the sale of energy, capacity and load variance products, including Slice, at rates that are subject to LB CRAC before the application of the LB CRAC, but using actual loads.~~

~~For the Slice rate,~~

~~REVw/oLBC(S) = [RATE(S) * LOAD(S)] - LDD(S) - C&R(S)~~

Because the Slice rate is stated as $/% per month, REVw/oLBCS, LOAD(S) is calculated using the percentage of Slice contracted for, with 28.29% = 2000aMW of Slice.

For Non-Slice Rates,

REVw/oLBC(NS) = [RATE(NS) * LOAD(NS) * Hours in month] – LDD(NS) – C&R(NS)

Because Non-Slice Rates are stated as mills/kWh and $/kW-month, LOAD(NS) is expressed in kWh and kW for the month.

(ii)Calculating Actual Monthly Revenues received

This calculation determines the monthly revenues BPA *actually did* receive from the sale of energy, capacity and load variance products, including Slice, at rates that are subject to LB-CRAC *after* the application of the LB-CRAC, but using actual loads .

For the Slice rate,

REVw/LBC(S) = [REVRATE(S) * LOAD(S)] – LDD(S) – C&R(S)

Because the Slice rate is stated as $/% per month, REVw/oLBCS, LOAD(S) is calculated using the percentage of Slice contracted for, with 28.29% = 2000aMW of Slice.

For Non-Slice Rates,

REVw/LBC(NS) = [REVRATE(NS) * LOAD(NS) * Hours in month] – LDD(NS) – C&R(NS)

Because Non-Slice Rates are stated as $/MWh and $/kW-month, LOAD(NS) is expressed in MWh and kW for the month.

(11) Calculating Total Revenues for a six-month period

(i)Without the LB-CRAC applied

~~TREVw/oLBC(S) = REVw/oLBC(S) for each month in six-month period.~~

~~TREVw/oLBC(NS) = REVw/oLBC(NS) for each month in six-month period.~~

~~TTREVw/oLBC = TREVw/oLBC(S)+TREVw/oLBC(NS)~~

~~(ii)With the LB CRAC applied~~

~~TREVw/LBC(S) = REVw/LBC(S) for each month in six-month period.~~

~~TREVw/LBC(NS) = REVw/LBC(NS) for each month in six-month period.~~

~~TTREVw/LBC = TREVw/LBC(S)+TREVw/LBC(NS)~~

g. **Determining the surcharge or rebate at the close of a six-month period.**

The calculations in this Section g are made once for each six-month period. They are applied only after a six-month period and are used to determine whether the costs incurred by BPA to acquire AAMTA during the preceding six-month period were more or less than the LB CRAC revenues actually received by BPA during such six-month period. The calculations in this Section will be performed as soon as the necessary actual data is available after each six-month period. There are four steps involved in this determination.

Step One:	Calculate the LB CRAC revenues that were actually collected during the six-month period separately for Slice and Non-Slice sales;
Step Two:	Calculate the LB CRAC revenues that are needed to cover the AAMTA power costs incurred by BPA during the six-month period, divided between Slice and Non-Slice products based on actual LB CRAC revenues;
Step Three:	Calculate the difference between Step One and Step Two for Slice and Non-Slice products separately;
Step Four:	Calculate the change in cost of meeting AAMTA associated with using the NACA(120) and NACA(0).
Step Five~~our~~:	Calculate the adjustment to the bill of each customer.

(i) Step One

LBCREV(S) = TREVw/LBC(S) – TREVw/oLBC(S)

LBCREV(NS) = TREVw/LBC(NS) – TREVw/oLBC(NS)

(ii) Step Two

ACTUALLBCREVREQ(S) = NACA~~(S)~~ * (TREVw/LBC(S)/TTREVw/LBC)

ACTUALLBCREVREQ(NS) = [NACA~~(NS)~~ * (TREVw/LBC(NS)/TTREVw/LBC)]

(iii) Step Three

REVDIFF(S) = LBCREV(S) - ACTUALLBCREVREQ(S)

REVDIFF(NS) = LBCREV(NS) - ACTUALLBCREVREQ(NS)

(iv) Step Four

In this step, the difference in cost associated with meeting AAMTA for the six-month period between NAC(0) and NAC(120) is determined. The difference will be referred to as

NACDIFF = NAC(0) – NAC(120).

(v) Step Five

There will be a separate line item on the bill of each customer purchasing products at rates subject to the LB CRAC reflecting a debit or a credit, and referred to as ADJUST(S) for the Slice rate and ADJUST(NS) for Non-Slice Rates.

(a) Bill Adjustment for a Slice purchaser.

ADJUST(S) = {REVDIFF(S) * [CUSTREV(S)/TREVw/LBC(S)]}/6

(b) Bill Adjustment for Purchaser of Non-Slice products subject to the LB CRAC.

ADJUST(NS) = {[REVDIFF(NS) + NACDIFF] * [CUSTREV(NS)/TREVw/LBC(NS)]}/6

(c) Each of these bill adjustments (ADJUST (NS)) (ADJUST (S)) will initially be added to the bill beginning the month following their finalization and shall continue for a six-month period. BPA and the purchaser may agree to a different payment schedule for any six-month period. For the first six-month period, since customers proposed two 3-month calculations, the results of the first 3-month calculation, scheduled for mid-February '02, will be spread across 3 months, while the second 3-month adjustment, scheduled for June '02, will be spread across six months (this assures no overlap between bill adjustments for the actual LB CRAC costs for this first six-month period).

2. Financial-Based Cost Recovery Adjustment Clause

The FB CRAC is a temporary, upward adjustment to posted power rates for certain Subscription sales which occurs if end-of-year Accumulated Net Revenues (ANR) in the generation function are forecasted to fall below a threshold level.

The FB CRAC applies to power customers under these firm power rate schedules: PF [Preference (excluding Slice), Exchange Program, and Exchange Subscription], Industrial Firm Power (IP-02), including under the Industrial Firm Power Targeted Adjustment Charge (IPTAC) and Cost-Based Index Rate, Residential Load (RL-02), New Resource Firm Power (NR-02), and Subscription purchases under Firm Power Products and Services (FPS). The FB CRAC does not apply to power sales under Pre-Subscription contracts to the extent prohibited by such contracts, purchases under the PF Slice Rate, the 900 aMW of financial benefits provided under the financial portion of any REP Settlement or for BPA's contractual obligations for Seasonal and Irrigation Mitigation sales, including for any eligible customer that converts from Slice to another BPA product. The FB CRAC does apply to the 1,000 aMW power sale portion of the REP Settlement, including where power sales are converted to cash payments calculated pursuant to Section 5(b) of the Residential Exchange Settlement Agreement.

a. **Formula for Calculation of the Financial-Based Cost Recovery Adjustment Clause**

By mid-August of the FY immediately prior to each FY of the rate period (*i.e.*, FY 2002-2006), a forecast of that end-of-year ANR will be completed. If the ANR at the end of the forecast year falls below the FB CRAC Threshold applicable to that FY, the FB CRAC will trigger, and a CRAC rate increase will go into effect beginning in October of the upcoming fiscal year.

The Revenue Amount will be determined by the following formula:

Revenue Amount is the lower of:

FB CRAC Threshold minus forecasted ANR;

or

The annual Maximum Planned Recovery Amount, shown in Table B below.

Where Revenue Amount is the amount of additional revenue that an increase in rates under FB CRAC is intended to generate during the period that the rate increase is effective.

Where FB CRAC Threshold is the "trigger point" for invoking a rate increase under the FB CRAC. The threshold is pre-specified for the end of FY 2001, 2002, 2003, 2004, and 2005, in Table B.

Where ANR is generation function net revenues, as accumulated since 1999, at the end of each of the FY 2001-2005. Audited Actual Accumulated Net Revenues (AANR), confirmed by BPA's independent auditing firm, will be used for FY 1999, and 2000, and any subsequent year for which they are available. Unaudited AANR will be used to the extent audited actuals are not available.

The expected value of a probabilistic forecast of ANR through the end of each FY will be calculated and used to determine if the threshold has been reached, and what the Revenue Amount is. Net revenues for any given FY are accrued revenues less accrued expenses, in accordance with Generally Accepted Accounting Practices, with the following two exceptions. First, for purposes of determining if the FB CRAC threshold has been reached, actual and forecasted expenses will include BPA expenses associated with Energy Northwest debt service as forecasted in the WP-02 Final Studies. Second, the impact of adopting Financial Accounting Standard 133, Accounting for Derivative Instruments and Hedging Activities, will not be considered in determining if the CRAC threshold has been reached. Only generation function revenues and expenses, which is to say actual and forecasted revenues and expenses that are associated with the production, acquisition, marketing, and conservation of electric power, will be included in determinations under the FB CRAC. Accrued revenues and expenses of the transmission function are excluded. Impacts of ~~f~~Forecasted revenues, positive or negative, from contractual true-up

pursuant to the Slice Agreement shall be included in the revenue forecast when determining the FB CRAC.

Where Maximum Planned Recovery Amount is the maximum annual amount planned to be recovered through the FB CRAC.

Table B

End of Fiscal Year	FB CRAC Threshold (ANR)	Maximum Planned Recovery Amount (Beginning October)
2001	$ -268M	NONE
2002	$ -290M	$135 M
2003	$ -148M	$150 M
2004	$ -181M	$150 M
2005	$ -181M	$175 M

Once the Revenue Amount is determined, that amount will be converted to the FB CRAC Percentage. The FB CRAC Percentage is the percentage increase in customers' rate (not including LB CRAC) in each of the firm power rate schedules listed above. This percentage will be applied to generate the additional FB CRAC revenue.

The FB CRAC Percentage will be determined by the following formula:

FB CRAC Percentage =
Revenue Amount
Divided by
FB CRAC Revenue Basis

For FY 2002, the FB CRAC Revenue Basis is the total generation revenue (not including LB CRAC) for the loads subject to FB CRAC for the FY in which the FB CRAC implementation begins, based on the then most current revenue forecast. For FYs 2003-2006, FB CRAC Revenue Basis is the total generation revenue (not including LB CRAC) for the loads subject to FB CRAC plus Slice loads for the FY in which the FB CRAC implementation begins, based on the then most current revenue forecast. Each non-Slice product's total charge for energy, demand, and load variance will be increased by this CRAC percentage amount.

Rate increases under the FB CRAC will be due in 12 monthly payments from November (for the October billing period) through October of the following year.

b. **FB CRAC Adjustment Timing**

In August prior to~~of~~ the beginning of each year of the rate period, the Administrator will determine whether the expected value of the ANR forecast at the end of that current FY is below the FB CRAC Threshold. If the ANR is forecasted to fall below the FB CRAC Threshold, the Administrator will propose, by the end of August, to assess a cost recovery adjustment to applicable rates for power deliveries beginning in October.

Each customer will be notified, on or about September 1st, of the percentage increase in rates due to the FB CRAC. The rates used to calculate the customers' bills for the following October through September will reflect the FB CRAC increase.

c. **FB CRAC Notification Process**

BPA shall follow the following notification procedures:

(1) **Financial Performance Status Reports**

Each quarter, BPA shall post on its electronic information access (World Wide Web) site, preliminary, unaudited, year-to-date aggregate financial results for generation, including ANR.

By January of each year, BPA shall post on its web site the audited AANR attributable to the generation function for the prior FY ending September 30.

In May and August of each year, BPA shall post on its web site an end-of-year forecast of ANR attributable to the generation function.

(2) **Actions to mitigate the need for the FB CRAC**

If actual accumulated net revenues at the end of a fiscal year are within $150 million of the FB CRAC threshold for the subsequent year, BPA will prepare and post on its Web site an analysis for the causes of BPA's financial decline compared to the rate case plan, and propose a prioritized list of potential actions to avert or mitigate the need for FB CRAC. BPA shall conduct a public comment period on these actions to avert or reduce a potential FB CRAC rate adjustment by the following October.

(3) **Notice of FB CRAC Trigger**

BPA shall complete and adopt a probabilistic forecast of end-of-year ANR in August of each year. BPA shall notify all customers and rate case parties by the end of August, in each of the FYs 2001-2005, if the expected value of ANR is forecasted to fall below the FB CRAC Threshold for that FY and, if so, the extent to which BPA intends to adjust rates under the FB CRAC. Notification will include the audited AANR for the prior FY, the forecast of end-of-year ANR, the calculation of the Revenue Amount, and the FB CRAC Percentage. The notice shall also describe the data and assumptions relied upon by BPA. Such data, assumptions and documentation, if non-proprietary and/or non-privileged, shall be made available for review at BPA upon request. The notice shall also contain the tentative schedule for the remainder of the FB CRAC implementation process.

In early September, for any year in which the ANR is forecasted to fall below the FB CRAC Threshold, BPA staff shall conduct a public forum to explain the ANR forecast, the calculation of the Revenue Amount and the FB CRAC Percentage, and demonstrate that the FB CRAC has been implemented in accordance with the GRSPs. The forum will provide an opportunity for public comment.

On or about September 30 of any fiscal year in which the ANR is forecasted to fall below the FB CRAC Threshold, the Administrator shall provide all customers the calculation of the adjustment and the resulting rate increase (as a percentage) applicable to each rate schedule.

d. **True-up**

There will be an opportunity for truing-up the FB CRAC Revenue Amount and each customer's portion of it, based on updated data. When audited actuals are available, in January in the year subsequent to the FB CRAC being implemented, the AANR will be compared to the ANR forecast used to implement the FB CRAC. If the forecasted amount is within $5 million of the AANR (the tolerance), no true-up will be made. If AANR differs from the forecast by more that the tolerance, an adjustment will be made in customer bills for the second half of the year. The adjustment will be made as follows:

FB CRAC Adjustment = (difference between the originally calculated FB CRAC Revenue Amount and Revenue Amount calculated using AANR)
divided by
generation revenue (not including LB CRAC) for the loads subject to FB CRAC, as forecasted for power deliveries for April through September.

The resulting percentage will be used to adjust the FB CRAC Percentage applied to each customer's bills for April through September. The total amount collected, however, will not exceed the Maximum Planned Recovery Amount.

3. Safety-Net Cost Recovery Adjustment Clause

A Safety Net CRAC will be available if the Administrator determines that, after implementation of the FB CRAC and any Augmentation True-Ups, either of the following conditions exist:

- BPA forecasts a 50 percent or greater probability that it will nonetheless miss its next payment to Treasury or other creditor, or
- BPA has missed a payment to Treasury or has satisfied its obligation to Treasury but has missed a payment to any other creditor.

The SN CRAC applies to power purchases under the following firm power rate schedules: PF [Preference (excluding Slice), Exchange Program and Exchange Subscription], Industrial Firm Power (IP-02), including under the Industrial Firm Power Targeted Adjustment Charge (IPTAC) and Cost-Based Index Rate, Residential Load (RL-02) (including both the actual power deliveries and the 900 aMW of monetary benefits under the financial portion of any REP Settlement), New Resource Firm Power (NR-02), and purchases under Firm Power Products and Services (FPS). The SN CRAC does not apply to power purchases under Pre-Subscription contracts to the extent prohibited by such contracts, to BPA's current contractual obligations for Seasonal and Irrigation Mitigation sales including for any eligible customer that converts from Slice to another BPA product, or to purchases under the PF Slice Rate.

The SN CRAC will be an upward adjustment to posted power rates subject to the FB CRAC by modifying the FB CRAC parameters. BPA will propose changes to the FB CRAC parameters that will, to the extent market and other risk factors allow, achieve a high probability that the remainder of Treasury payments during the FY 2002-2006 rate period will be made in full. BPA's proposal could include changes to the Revenue Amount, the duration (the length of time the SN CRAC would be in place, which could be more than one year), and the timing of collection. The additional revenue to be generated by the SN CRAC will be collected through a uniform percentage increase in all rates subject to the FB

CRAC and a commensurate decrease in the financial portion of the Residential Exchange Settlement.

a. **SN CRAC Notification Process**

At the time the Administrator determines that the SN CRAC has triggered, BPA will send written notification of the determination to customers that purchase power under rates subject to the FB CRAC and to interested parties. Such notification shall include the documentation used by BPA to determine that the SN CRAC has triggered, the amount of any forecast shortfall, and the time and location of a workshop on the SN CRAC.

The purpose of the SN CRAC workshop will be to discuss with customers and interested parties the cause of shortfall, and any proposed changes to the FB CRAC that will achieve a high probability that the remainder of Treasury payments during the FY 2002-2006 rate period will be made timely. In determining which proposal to include in its initial proposal in the SN CRAC Section 7(i) proceeding, BPA will give priority to prudent cost management and other options that enhance Treasury Payment Probability while minimizing changes to the FB CRAC.

b. **SN CRAC Hearing Process**

As soon as practicable after a determination that the SN CRAC has triggered, BPA will publish a Federal Register notice initiating an expedited hearing process to be conducted in accordance with Section 7(i) of the Northwest Power Act. The hearing shall be completed within 40 days, unless a different duration is agreed to by the parties. Upon completion of such hearing, BPA will submit the following documentation in support of a request for review and confirmation: Statements A through F from the 2002 BPA Wholesale Power Rate Adjustment Proceeding, Separate Accounting Analysis, current and revised revenue tests, the proposed revisions to the FB CRAC parameters and the administrative record compiled by BPA in the SN CRAC proceeding.

The changes to the FB CRAC parameters shall take effect 61 days from filing with FERC unless FERC orders otherwise prior to that time.

h. Dividend Distribution Clause

The DDC is a clause establishing criteria that the Administrator will use to decide whether funds are to be distributed to customers and the amount that is to be distributed. The DDC enables BPA to distribute funds to eligible firm power customers and establishes the mechanism to be used to make a distribution.

The DDC applies to purchases by power customers under these firm power rate schedules subject to the FB CRAC, including: PF [Preference (excluding Slice), Exchange Program, and Exchange Subscription], Industrial Firm Power (IP-02), including under the Industrial Firm Power Targeted Adjustment Charge (IPTAC) and Cost-Based Index Rate, Residential Load (RL-02) New Resource Firm Power (NR-02), and purchases under Firm Power Products and Services (FPS) that are subject to the FB CRAC. The DDC also applies to the financial portion of the REP Settlement as described herein. The DDC does not apply to power purchases under Pre-Subscription contracts, or purchases under the Slice Rate.

1. Formula for the Calculation of the Dividend Distribution Amount

The DDC will be implemented if audited AANR for the end of any of the FY 2002-2005 are above the DDC Threshold value.

AANR are generation function net revenues, as accumulated since 1999, at the end of each of the FY 2002-2005. Net revenues are accrued revenues less accrued expenses, in accordance with Generally Accepted Accounting Practices, with the following exceptions. For purposes of determining if the DDC threshold has been reached, actual and forecasted expenses will include BPA expenses associated with Energy Northwest debt service as forecasted in the May 2000 WP-02 Final Studies. The impact of adopting Financial Accounting Standard 133, Accounting for Derivative Instruments and Hedging Activities, will not be considered in determining if the CRAC threshold has been reached. Only generation function revenues and expenses, which is to say accrued revenues and accrued expenses that are associated with the production, acquisition, marketing, and conservation of electric power, are included in determinations under the DDC; accrued revenues and expenses of the transmission function are excluded. As part of BPA's annual audit process, BPA's independent outside auditing firm will confirm that BPA's AANR determination was consistent with applicable criteria. This confirmation will be made in accordance with additional agreed upon procedures established by BPA and its independent outside auditing firm after consultation with interested parties.

DDC Threshold is the level of AANR that must be realized before a distribution is made as required by this section. The DDC Threshold is $1,110 million for the end of FY 2002, $852 million for the end of FY 2003, and $519 million for the end of FYs 2004, and 2005.

The DDC threshold for any fiscal year will be adjusted upward by the following:

a. In the event that there has been a power system emergency (as defined in "FCRPS Protocols for Emergency Operation In Response to Generation or Transmission Emergencies" dated September 22, 2000, or replacement protocols) during the fiscal year; and BPA has agreed to provide additional funding to mitigate the impact of the emergency operations on fish and wildlife, any of the additional emergency-related fish and wildlife funding which BPA has not spent during that fiscal year will be added to the threshold amount for that year; and/or

b. In the event that BPA fish and wildlife operations and maintenance ("direct program") costs previously budgeted for expenditure in that FY but were not spent, and for which a need continues, will be added to the threshold amount for that year.

DDC Amount is the aggregate amount in excess of the DDC Threshold that is available to be distributed to customers. The DDC Amount may be equal to zero and will be determined by the following formula:

DDC Amount =
AANR - DDC Threshold, as adjusted

The first $15 million of the DDC Amount, if the DDC Amount exceeds $15 million, or the entire DDC Amount if it equals $15 million or less, will be allocated to qualifying customers' participating in the C&R Discount. The C&R Discount is a rate mechanism designed to encourage incremental conservation and renewable resource development by BPA's power purchasers under PF, IP, RL, and NR rate schedules. *See* C&R Discount GRSPs, Section II.A.

The Customer DDC Amount, which is the DDC Amount after reduction by the $15 million as described in the preceding paragraph, will be returned to power customers. Any such amounts will be returned to customers in proportion to the DDC Customer Revenue Amount, which is the revenue BPA received from each customer under rates subject to the DDC since the beginning of the rate period, or since the last DDC, whichever is later. A customer's DDC Customer Revenue Amount excludes Slice revenues, and includes all Non-Slice CRAC revenues. The IOU financial benefit is included as revenue based on the product of each customer's share of 900 aMW and the sum of the RL-02 rate and the amount of any CRAC applied to power deliveries under such rate.

DDC Percentage =
Each customer's DDC Customer Revenue Amount
divided by
sum of all Customer Revenue Amounts

Each covered power customer will receive a rebate equal to the Power Customer DDC Percentage times the Customer DDC Amount. One-twelfth of each customer's share of the Customer DDC Amount will be credited to customers, on bills for deliveries beginning ~~May~~April 1, and, for any Fiscal Year 2003-2005, remain in effect for 12 months, *i.e.*, through March~~April~~ 30 of the following year. In the last year of the rate period (FY 2006), one-sixth~~fifth~~ of each customer's share of the Customer DDC Amount will be credited to customers, on bills for deliveries beginning April~~May~~ 1, through September 30, 2006.

2. Determination of a Distribution

In January of each year of the rate period (FY 2003-2006), the Administrator will determine whether the AANR exceeds the DDC Threshold. If the AANR exceeds the DDC Threshold, customers and rate case parties will be so notified. By March 1, the Administrator will provide calculations of any proposed distribution of Customer DDC Amount. The Administrator will issue a final decision on the proposal on or about April 15.

3. Distribution Notification Process

BPA shall follow the following notification procedures:

a. **Financial Performance Status Reports**

By no later than August 31 of each year, BPA shall post on its electronic information access site (World Wide Web) a forecast of AANR attributable to the generation function for the FY ending September 30.

b. **Notice of DDC Trigger**

On or about January 15 in each of the FY 2003-2006, BPA will notify all power customers and rate case parties if the AANR exceeds the DDC Threshold. (If the December unaudited AANR report for the generation function indicated that the DDC Threshold might be exceeded, and the audited actuals show that it was not exceeded, customers will also be notified.)

(1) On or about February 15~~March 1~~ of any of the FY 2003-2006 in which the AANR exceeds the DDC Threshold, the Administrator will notify all power customers and rate case parties. Notification

will include the AANR for the prior FY, the DDC Amount, the calculation of any adjustments to the threshold, calculation of the DDC Amount, the sum of Customer Revenue Amounts, and each customer's proposed DDC percentage. The notice shall also describe the data and assumptions relied upon by BPA. Such data, assumptions, and documentation, if non-proprietary and/or non-privileged, shall be made available for review at BPA upon request. The notice shall also contain the tentative schedule for the remainder of the DDC implementation process.

Prior to ~~During~~ March 15, BPA will conduct a public review and comment process on the proposal.

(2) On or about April 15 of any of the FY 2003-2006 in which the AANR exceeds the DDC Threshold, BPA shall notify customers to which the DDC applies of the decision on the proposal, the final calculation of the DDC Amount, the allocation of the DDC Amount, and, if applicable, the resulting level of the Power Customer DDC Percentage to be applied to each applicable firm power rate schedule.

J. Five-Year Flat Block Price Forecast

The Five-Year Flat Block Price Forecast is BPA's price estimate of the market price for five-year block purchases for the FY 2002-2006 period. This forecast is used in calculating the cash component of the settlements of the Residential Exchange Program with regional IOUs as described in BPA's Power Subscription Strategy. The Five-Year Flat Block Price Forecast for this purpose is $38 per MWh.

S. Slice True-Up Adjustment

Each year BPA will calculate the financial true-up for the previous fiscal year, in accordance with the provisions of the Slice Agreement. This contractual true-up will be completed each year regardless of whether the LB CRAC has increased or decreased the PF Slice Rate. The revenues from this contractual true-up will not be included in any calculation, or application, of the LB CRAC. In addition, adjustments to the Slice rate contained in Administrator's Record of Decision in BPA Docket WP-02 that occur in accordance with the methodology in section F of these GRSPs are separate, and are applied separately from, the financial true-up under the Slice Agreement referred to in this paragraph.

T. Slice Portion of IOU Settlement

Each monthly Slice bill will include a line item to account for the proposed increment in the IOU cash settlement above the May Proposal. The revenues from this section will not be included in any calculation of the LB CRAC.

The monthly adjustment per one-percent Slice is proposed to be:
[Incremental amount of IOU Settlement costs in the Supplemental Rate Case ROD/12/100] = $ per month per one-percent Slice.